CENTRAL PATENTS INDEX

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Section D:

FOOD
DETERGENTS

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C.F.T.R.I., MYSORE

ABSTRACTS

INDEXES

II - PATENTEE

V - BASIC NUMBER

VII - PATENT NUMBER

COUNTRY	PUB DATE(S)	NUMBER RANGE
BELGIUM		
-Delayed	25 NOV - 1 DEC 80	883,478 - 883,588
-Non Delayed	1 DEC 80	884,588 - 884,693
BRAZIL	25 NOV 80	7,901,602 - 8,002,215
CANADA	11 NOV 80	1,089,151 - 1,089,600
SWITZERLAND	14 NOV + 28 NOV 80	617,054 - 617,314 620,078 - 620,562
CZECHOSLOVAKIA	29 AUG 80	7,900,613 - 7,907,186
DENMARK	17 NOV 80	7,901,551 - 8,003,168
W. GERMANY		
-DAS	4 DEC 80	1,695,560 - 3,014,936
-OLS	4 DEC 80	2,900,251 - 3,021,156
FRANCE*	26 SEP 80 (BOPI 31 OCT 80)	2,450,034 - 2,450,554
UNITED KINGDOM	10 DEC 80	1,580,871 - 1,581,430 2,048,031 - 2,048,630
JAPAN		
-Unexamined	—	46,005,045 - 55,085,562
	25 OCT - 31 OCT 80	55,137,158 - 55,139,800
-Examined	13 NOV - 19 NOV 80	80,044,561 - 80,045,840
NETHERLANDS	24 NOV - 30 NOV 80	7,903,957 - 8,003,043
NORWAY	17 NOV 80	7,900,140 - 8,001,219
RUMANIA	DECEMBER 79	62,302 - 71,113
SOVIET UNION	—	729,235 - 733,531
SWEDEN	24 NOV 80	7,900,025 - 8,007,140
UNITED STATES		
-Reissues	25 NOV 80	Re30,438 - Re30,439
-Patents	25 NOV 80	4,234,972 - 4,236,256
PCT	27 NOV 80	8,002,493 - 8,002,633

*Printed patents actually published early November - mid November, 1980

Arrangement of Abstracts

See Appendix I for definition of 'Major' and 'Minor' Countries.

'MAJOR' COUNTRIES – An alerting abstract of every basic and examined equivalent document is provided except for equivalents from Canada, East Germany and Switzerland. The abstracts are arranged in CPI class order and within any one of the 135 classes are in country and patent number order.

'MINOR' COUNTRIES – Basic headings are included in sequence with the entries from the 'Major' countries.

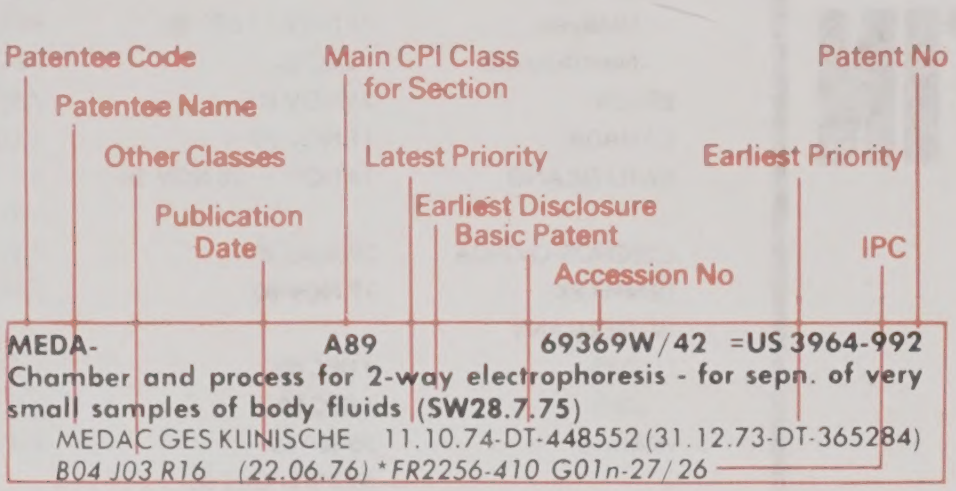
CPI Section Headings

See inside cover for further details.

A	Polymer Chemistry	F	Textiles, Paper, Cellulose
A+	Polymer Applns.	G	Printing, Coating, Photographic Chemistry
AE	Polymer & General Chemistry	H	Petroleum
B	Pharmaceuticals	J	Chemical Engineering
C	Agricultural Chemistry	K	Nucleonics, Explosives, Protection
D	Food, Disinfectants, Detergents	L	Refractories, Ceramics
E	General Chemistry	M	Metallurgy
E+	General Chemistry Applns.		

Typical Abstract Heading

See CPI/WPI Instruction Manual No. 1A for explanation of the various flagged descriptors.



Copies of Specifications may be ordered from our PATENTS SUPPLY DIVISION.

D1: FOOD; FERMENTATION

D11 : BAKING

CHFW ★ D11 88536 C/50 ★DT 2921-682
Activation of cereal grain for bread-making - by moistening and conditioning at low temp.
WERNER & MERTZ 29.05.79-DT-921682
P41 (04.12.80) B02b-01/08

Activation is carried out by moistening the whole grain and conditioning the moist grain at 10-20°C (pref. ≤ 16°C, esp. ca. 14°C). Moistening is pref. effected by wetting with water at ≤20°C (pref. at the conditioning temp.) for 30-120 (esp. ca 90) min. until the moisture content of the grain (germ and surface layers) is ca. 40 wt.% Conditioning is pref. effected for 2-9(esp.<7) hr. The conditioned grain is pref. dried to a moisture content of ≤20 (esp. ca. 16) wt.% at <40°C for 30-90 (esp. ca 60)min.

The process gives greater increases in activation rate (germ growth rate) and α-amylase activity than conventional processes with conditioning at elevated temp. 29.5.79. as 921682 (10pp367)

SUAY/ ★ D11 88696 C/50 ★FR 2450-061
Bakery oven with continuous bucket conveyor carrying dough pieces - has through open-topped compartments independently controllable at different temps. for baking bread
SUAY BALAGUER E 26.09.79-ES-245787 (02.03.79-ES-241756)
(31.10.80) A21b-01/26

The baking chamber is divided into a number of open-topped compartments sped. by parallel, vertical partitions rising from the base of the chamber. Each compartment is provided with a regulating valve through which hot air can be received from a heating chamber. Before entering the first compartment, the path of the conveyor chain pref. passes through a steaming zone above the compartments.

The prod. can be preheated, baked and precooled inside the chamber. Variety of prods. available by selective control of baking conditions. 29.2.80 as 004631 (+2.3.79(2)-ES-241756/7) (10pp448)

BISC- ★ D11 88697 C/50 ★FR 2450-062
Mfr. of mechanically stronger and less friable rusks etc. - by slicing loaves longitudinally parallel to texture lines of dough
CENTRE BISCOTTE 27.02.79-FR-005040
(31.10.80) A21d-08/02 A21d-13

Process comprises cutting a loaf into slices which are then toasted. The dough of this loaf has been drawn out longitudinally and rolled transversely. The individual slices are cut parallel to the texture lines of the dough.

The loaf is pref. cut from a multi-loaf length to a loaf length equal to the required length of a rusk; alternatively the loaf can be of a length equal to several times the length of a rusk; slices can then be cut to rusk size. 27.2.79 as 005040 (9pp448)

RANC/ ★ D11 88726 C/50 ★FR 2450-420
Small scale traditional style oven - for old fashioned baking, can be supplied as kit for do-it-yourself construction
RANCE P 27.02.79-FR-005313
Q74 (31.10.80) A21b-01/04 F24b-01/24 F24b-13/02

Flat approx. rectangular hearth is first laid in refractory material. A template is erected above the hearth, and has convex top face of approx. semi-circular cross-section and is made of material which will burn. Using the top of the arch as a former and support, refractory bricks are built up as a furnace arch over the hearth. A chimney flue is left at the back end of the arch.

A door is fixed to the front end of the arch and a refractory back at the opposite end. An adjustable damper is fixed to the chimney flue. A casing wall is erected around the unit, leaving access for the door and for the chimney flue connection. A jacket space is packed with thermal insulating material, partic. sand. The template is then burned away leaving the refractory arch intact.

Used for old-fashioned cooking of food prod. esp. bread and pastries. This oven can be built without craftsmen or specialist knowledge. It can be connected to existing chimneys. 27.2.79 as 005313 (20pp448)

WILK/ D11 57016 A/32 =GB 1581-092
(Flaky) pastry prodn. without a baking stage - by passing doughy mixt. through a series of rollers having controllable temps.
WILKE G 01.02.77-DT-703982
*(10.12.80) *DT2703-982 A21c-03/02*

Pastry products are produced by rolling a mixture using a series of rollers, each succeeding roller moving faster, to form a fleece-like film on the last roller which is transferred onto a belt. The linear speed of the belt and the rotational speed of the last roller are adjusted to impart an undilating effect on the film to assist drying.

The temp. of the rollers is controlled, pref. by circulating brine. Temp. of rollers is pref. 0-60°C. Fat content can be reduced in pastry. 1.2.78 as 004078. (4pp)

GRIN D11 63105 Y/36 =GB 1581-331
Monoglyceride phosphatide powder additive for bread etc. - prepd. by spray cooling moltn mixt.
GRINDSTED VAERKET A/S 03.05.76-GB-018022
*(10.12.80) *BE-854-243 A21d-02/16 A23j-07/02*

Pulverulent, free-flowing monoglyceride additive (I) for use in the prepn. of farinaceous, and starch-contg. prods. e.g. bread, macaroni, spaghetti, noodles and extruded snack prods., contains ⩾1 distilled monoglyceride of a satd. 12-24C fatty acid. (I) is obtd. by spray-cooling a dry mixt. consisting only of the molten monoglyceride and ⩾1 phosphatide (not hydrolysed) and opt. an edible solid pulverulent carrier. Pref. the phosphatide is a lecithin (esp. non-hydroxylated soybean lecithin.

(I) improve bread texture and reduce staling. They also ensure a firm non-sticky consistency when pasta is cooked. 2.5.77. (14pp918)

SHIN- ★ D11 89046 C/50 ★J5 5138-352
Bread with improved taste, volume, appearance, texture etc. - is prepd. from flour, L-cystine, powdered wheat embryo or alcohol or dry yeast and alpha-amylase and protease
SHINKA SHOKUHIN KK 16.04.79-JA-045360
(D16) (29.10.80) A21d-02/24 A21d-08 A21d-13

New breads are characterised by contg. (a) flour, (b) L-crystine as the elasticity-improving agent for dough, (c) one of powdered wheat embryo, dry yeast or powdered alcohol as the softening agent and (d) α-amylase and protease to improve taste and flavour of the bread.

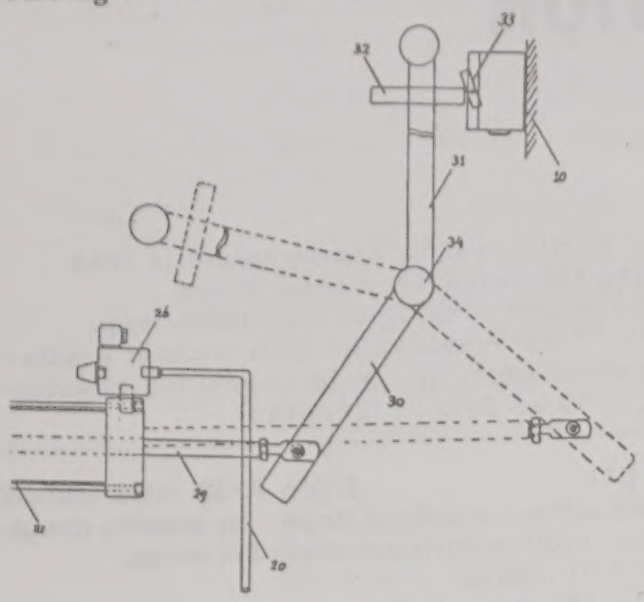
Breads has improved taste and flavour, volume, appearance, texture and keeping qualities and can be prepd. from antural substances exclusively without using yeast food which has been used in prior art.

L-crystine is used 5-200 ppm pref. 25-100 ppm on flour. (b) are used 50-500ppm (pref. 100-250 ppm), 10-200 ppm (pref. 50-100 ppm) and 10-200 ppm (pref. 50-100 ppm) on flour respectively. On 1 kg of flour α-amylase and protease are used 25-100 S.K.B. unit pref. 40-60 S.K.B. unit and 10-40 P.U.N. unit pref. 10-20 P.U.N. unit respectively. 16.4.79 as 045360 (6pp5)

DEDE- ★ D11 89415 C/50 ★NL 8004-385
Bread slicing machine with reciprocating knife drive - for air pump producing adjustable pressure for actuation of loaf pusher ram
DEDERT-PAKTOE BV 31.07.80-NL-004385
P62 (28.11.80) B26d-05/20

The mechanism comprises motor-driven reciprocating

slicing knives and a ram to continuously feed the loaf to



the knives as it is sliced. The ram movement is derived from rotation of a shaft (34). The knife drive crank also operates an air pump cylinder to produce an adjustable pressure which is used (via 20 and solenoid valve 26) to power a pneumatic cylinder (21) providing the feed movement of the ram.

The lever (30) rotating the shaft (34) may have an extension (31) which operates (32) a switch (33) to stop the motor when the loaf is fully fed through. 31.7.80 as 004385 (12pp1190).

BAKI= ★ D11 89479 C/50 ★SU-730-334

Leaven for mfr. of wheat or rye bread - prepd. using lyophilised mixt. of lactobacilli strains and opt. saccharomyces minor

BAKING IND RES INST (LEBA=) 21.11.77-SU-546124

(D16) (03.05.80) A21d-08/04

Leaven for bread is prepared by souring a flour-water mix with pure lactobacilli cultures until the desired acidity is reached. This process is simplified and accelerated by using lyophillised mixt of active bacilli strains which is diluted, before introduction into the dough mix, with an equal amt of hot water(temp 35-37°C). The mixt. is left aside for 7-10 min.

Yeast-free highly acidic leaven(moisture content 65-70%) is prepd from a wheat or rye flour using 25 wt.% (w.r.t. the flour) of Lactobacillus plantarum-30 and 25% of Lactobacillus fermenti-34; the souring is effected at 36-37°C to 14-20 OH acidity.

Kazanskaya, L. N., Afanaseva, O. K., Gurina, O. F., et al B 16/30.4.80.21.11.77.as546124(9pp70).

MOFO= ★ D11 89649 C/50 ★SU-730-678

Prodn. of stearoyl-butyric acid food surfactant prodn. - by heating alkali metal stearate and chloro propionate in alkylbenzene and treating prod. with strong acid

MOSC FOOD IND RES (ERCH=) 11.02.77-SU-451920

E17 (D13) (02.05.80) C07c-67/10 C07c-69/68

Stearoyl-butyric acid is used as surfactant in bread and confectionary prods mfr. It is prepd in higher yield by heating alkali metal salt of stearic acid with dosed amts of alpha-chloro-propionic acid alkali metal salt followed by the treatment with mineral acid. The reaction is conducted in alkyl-benzene solvent at 115-135°C using molar ratios stearate:propionate salts of 1:3 and solvent:salt mixt of (9-12):1.

Then the resulting prod is treated with strong mineral acid at 18-30°C to give after washing mixt with water and distilling off solvent final prod in 92.5% yield.

Nechaev, A. P., Chernysheva, D. A., Gabrielyan, S. M. et al Bul. 16/30.3.80.11.2.77.as451920(6pp938).

See Also

D13 J8 0045176

D12: MEAT; FISH PROCESSING

DALI/ ★ D12 C/50 ★CS 7903-188

System for ventral cutting of fish

DALIBA J 10.05.79-CS-003188

(29.08.80) A22c-25/16

TEEP D12 03780 X/02 =DS 2546-020

Aluminium-tanned collagen sausage casing - with pptn of aluminium in alkaline bath

TEE PAK INC 15.10.74-US-514686

*(04.12.80) *US3930-035 A22c-13*

Edible collagen sausage skins are prepd. by extruding a collagen suspension through a ring-forming nozzle, coagulating the resulting tube pref. in a bath contg. 0.05-0.15% $NaHCO_3$ and 0.03-0.07% alkali or ammonium salt of a strong acid and then curing in two stages. In the first stage the tube is passed through a bath contg. 0.3-1.25 (0.6-1)% aluminium curing agent calculated as $Al_2(SO_4)_3.14H_2O$ for 2-15 minutes and in the second stage through a bath contg. 0.008-0.03% glutaraldehyde at pH 4-4.5 for at least 2 minutes and pref. 2-6 minutes.

The double curing reduces the problems connected with the use of aluminium or glutaraldehyde alone. 14.10.75 as 546020 (7pp068)

UENO D12 47240 B/26 =DS 2907-204

Preparing ground frozen fish used for fish pastes - contg. sugar alcohol and oil colloid plus poly phosphate

UENO SEIYAKU OYO KE 08.03.78-JA-025520

*(04.12.80) *BE-874-362 A23l-01/32*

Deep frozen, ground fish meat is prepd. by mixing the ground fish with 1-10% (based on fish wt.) of powdered or granulated colloids comprising 70-99 wt.% crystalline, stabilised sugar alcohol and 30-1 wt.% oil or fat dispersed therein and 0.1-0.5% (based on fish wt.) of powdered or granulated polyphosphate and then freezing.

The powdered or granulated colloid is pref. prepd. by heating the sugar alcohol above its m.pt. stirring in the oil or fat and then cooling and seeding the melt to crystallise out the sugar alcohol. The prod. has good elasticity and colour even after five months storage. 23.2.79 as 907204 (8pp068)

NMHB ★ D12 88441 C/50 ★DS 3014-936

Double fish fillet skinning machine - with roughened periphery of drive drum separated by central belt groove

NORDISCH MASCH R BAADER 18.04.80-DT-014936

(04.12.80) A22c-25/17

A skinning machine for double fish fillets uses as the transporting area the circumference of a drum which revolves around a horizontal shaft. A central groove on the drum accepts tow round drive blets. These belts are deflected around grooved pulleys on both sides, their axes lie on a line which is a secant to the drum periphery.

This skinning machine is simple and functionally reliable. It removes the skin from double fillets with the greatest economy. 18.4.80 as 014936 (5pp39)

UNIC D12 44956 Y/25 =GB 1580-971

Placing sizing disc in end of shirred casing - by first inserting collapsed cage and then expanding radially

UNION CARBIDE CORP 04.05.76-US-682958

*+Q31 (10.12.80) *US4028-775 A22c-13*

Appts. for implanting a sizing disc into the unshirred end of a casing consists of a spreader secured to a frame and for insertion into the unshirred end to effect expansion and allow insertion of the disc. The spreader consists of pivoted flexible elements which move from a retracted position to an expanded position in which they define a cylinder.

After disc insertion, the end of the casing is gathered and closed. 3.5.77 as 018417. (13pp1376)

RT- ★ D12 88754 C/50 ★GB 2048-046
aring hamburgers for distribution and storage - by searing rior without cooking through then refrigerating to allow sequent microwave cooking
ANSTALT WARTEGG 01.05.79-GB-015041
10.12.80) A23l-01 A23l-03/36
v hamburgers are prepd. by searing the exterior with- cooking through, and then refrigerating. The seared nburger is pref. placed between the two halves of a sted bun which is placed in a container in which it re- ins during refrigeration and distribution.
Hamburgers can then be cooked by microwave heating le having the appearance of conventionally cooked ham- gers. Searing may be carried out by brief griddling on y hot plates or rollers, or by using gas jets or IR heat- . 1.5.79 as 015041. (2pp1358)

RE D12 42300 Y/24 =J8 0045-164
nokeable casing material for meat - comprises paper impregnated th ethylene-vinyl alcohol copolymer, polyvinyl alcohol, asticiser compsn.
KUREHA CHEM IND KK 29.10.75-JA-129354
*A97 F09 (A14 A17) (17.11.80) *J52054-051 A22c-13 +A23l-03*
aterial consists of 100 pts.wt. paper and 10-200 pts.wt. nproving agent, which is composed of 5-95 wt % ethylene inyl alcohol copolymer, 95-5 wt % PVA and 0.5-80 wt % asticiser (e.g.water, glycerin, propylene glycol, ethyl- ne glycol, sucrose fatty acid ester, etc.) (the sum of the ree ingredients should be 100 wt %). Material can be us- l as a substitute for cellulose casing material.
The material has excellent smoking property, contract ng property, thermal creep, shock, water, oil, age and emical resistance, sliding property is packaging of eat, adhesion between casing and meat after smoking, taching property after cutting prods. etc. They are non- xic and can be prepd. without pollution problems cf. epn. of cellulose casings from viscose. 29.10.75 as 9354, A22c-13/00, A23l-3/00 (17.11.80) KUREHA CHEM D. KK (5pp5) (J52054051)

NIL D12 81298 S/51 =J8 0045-179
oating food esp sausages - with methyl cellulose by extrusion
UNILEVER NV 16.06.70-GB-029151
*A32 (A11) (17.11.80) *BE-768-606 A22c-11 +A23l-01/31*
ood is coated with non-ionic cellulose ether which sets ermally. The coating material is extruded as a paste in e form of a tube onto the food. The coating material may ntain 5% to 20% of its solid content as cellulose ether. he coating has the advantage that it does not hydrolise hen cooked in a humid atmosphere with resulting loss of echanical strength. 16.6.71 as 043193 (clg.16.6.70-GB- 9151) A23l-1/31, A22c-11/00 (17.11.80) UNILEVER N.V. pp) (J47001324)

OYA/ D12 10222 B/06 =US 4234-997
nimal carcass splitting machine - with carcass holding and rusting gear for descending circular saw carriage (NL 23.1.79)
KOYAMA N 26.06.78-JA-076573 (19.07.77-JA-085657)
*(25.11.80) *DT2831-749 A22b-05/20 +A22b-07*
butchered carcass is split into halves along the spine by nging at the hind legs from a suspension conveyor, stop- ng between a support and pusher, turning through 90° so at the carcass back faces the support while bringing the nveyor table into index with the pusher, and actuating e pusher and support so that the carcass is tightly clamp d.
The pusher has rods which contact the ribs to surround jacent vertebrae and hold the spine between them, and a ive box with a saw behind the support is moved from upp rmost to lowermost position along a guide frame install- l on a floor so that the saw rotate and split the carcass. he method minimises manual work. The apparatus is cla- ned. 11.7.78 as 923532(8pp1358)

QUAK ★ D12 90022 C/50 ★US 4235-935
Bacon analogue giving realistic appearance - contg. white dough and dark and light red doughs layered to form stripes
QUAKER OATS CO 23.02.78-US-880449
(25.11.80) A23j-03 A23l-01/27
A bacon analogue is prepd. from three emulsions, (I), (II) and (III), which simulate respectively the dark red lean light red lean and fatty portions of bacon. Each contains 2-7 wt. % heat setting protein. 0-5wt. % of a protein additive which is soy, peanut or cottonseed protein isolate or proteinate, 0.5-4 wt. % starch, 0.5-6wt. % vegetable gum, 0.4-1.5wt. % surfactant, 15-30 wt. % water, 4-18 wt. % oil or fat, and vitamins, colouring and flavouring. An emulsion (IV) is prepd. from 0.1-1.0 wt. % protein additive, 0.05-1 wt. % vegetable gum, 5-15 wt. % water, 5-15 wt. % oil or fat, and flavouring agents. Three doughs are prepd. by separately mixing (I), (II) and (III) with portions of (IV). 15-30 wt. % of protein fibres are added to each dough. The dough are then co-extruded to form a block composed of 4 strips, in the sequence ''dark red,'' light red'' ''fatty'' and ''light red''. The block is heated and sliced perpendicular to the plane of the strips.
The slices have a marbled appearance similar to real bacon, and crinkle when cooked. No oil or fat is reqd. for cooking. The ''lean'' and ''fatty'' portions have distinctly different textures. 23.2.78 as 880449(8pp955)

KEYS- D12 35699 B/19 =US 4235-941
Densified frozen, meat-fibre slices with surface grooves - simulate charcoal-grilled steaks with light and dark bands
KEYSTONE FOODS CORP 01.11.77-US-847674
*(25.11.80) *DT2847-286 A23j-01/31*
Meat product resembling a charcoal broiled steak is prepared by forming grooves in one surface of a frozen meat slab, and heating the slab on a plate groove side down until the grooves have flattend. The lands between the grooves are darker than the grooves.
Pref. the grooves are transverse to the long dimension of the slab. Grooves are pref. spaced by 1''.
Simulated charcoal cooled steaks can be cooked quickly. 1.11.77 as 847674(6pp1376)

SLAG- ★ D12 90130 C/50 ★WP 8002-597
Detecting boar taint in carcasses of non castrated boars - by measuring infrared transmission, esp. of the fat
SLAGTERIERNES FORSK (BJAR) 16.05.79-DK-002029
S03 X25 (27.11.80) G01n-21 G01n-33/12
D/S: N(US) + E(CH, DT, FR, GB, NL, OE, SW).
'Boar taint' in individual carcasses (or parts) of uncastrated boars is detected by measuring IR transmission data of the carcass and comparing standard IR data known to be correlated with boar taint.
Pref. a fat sample is examined and the parameter compared is the absorbance ratio at two different wavelengths. Additional parameters correlated with taint can also be measured, particularly the unsatd. fatty acid content of the fat, measured by refractive index or IR transmission.
The method allows tainted carcasses to be detected on-line in the slaughterhouse. These carcasses can be diverted for uses where the taint is concealed. Reliable identification means that pigs need not be castrated, with considerable advantages since boars gain more wt., produce less fat and utilise fodder more efficiently than castrated animals.
16.5.80 as US0028.(24pp1251).
(E) ISR: DT2728717; SW-345740; GB1494147; DS2621015; SW-303054; DS2508523; DT2912848; 1 Journal Reference.

D13: OTHER FOODSTUFFS

AMPL/ ★ D13 88373 C/50 ★BE-884-085
Writing instrument esp. a ball-pen fitted with lollipop - fixed on stick and exchangeable for another
AMPLIKART P V B A 30.06.80-BE-884085
P77 (16.10.80) A23g B43k

A sweetmeat is fitted at one end of a writing instrument such as a marker, a pencil, a ball pen, etc. The sweetmeat is pref. a lollipop or something similar and the writing instrument terminates at its top end in a tube. A stick can slide in this and holds the lollipop, which is exchangeable. 30.6.80 as 884085 (3pp1014)

BARR- ★ D13 88384 C/50 ★BE-884-565
Continuous pasteuriser for canned or bottled prod. esp. beer - prevents unbalance of thermal regeneration system by compensating for gaps of prod. on conveyor
BARRY-WEHMILLER CO 01.08.79-US-062693
Q78 (D14) (17.11.80) A23p F28c

Continuous process and a machine for pasteurising food prods. which have been filled and sealed in air-tight containers, partic. bottles, jars and cans is described. The process is of the type in which a horizontal, perforated conveyor band is completely filled, both laterally and longitudinally, with containers which are carried in sequence through preheater spray zones. A pasteurising spray zone and cooling spray zones. Water sprayed over the containers and through the conveyor band falls into tank sections for recycling.

Since the containers are first heated and then cooled, it is usual to minimise heat energy input by regeneration of heat between water sprayed in the cooling and preheater zones. With the conveyor running full of containers, this regeneration system rapidly achieves a condition of thermal equilibrium.

If there is an interruption in the supply of containers to the pasteuriser, e.g. because a filling machine breaks down, a longitudinal gap occurs in the bed of the containers advancing on the conveyor. Thermal equilibrium is now maintained by controlled injection of water at ambient temp. to the preheating zones, transfer of surplus hot water from the preheat zones to a storage tank and synchronised recycling of water from the storage tank to the cooling zones as the 'gap' passes through them. 31.7.80 as 884565 (21pp448)

QUAK ★ D13 88385 C/50 ★BE-884-573
Solidification of food particles - using an alginate, a calcium salt, and as solidification inhibitor, a sugar or alcohol
QUAKER OATS CO 19.09.79-GB-032490 (01.08.79-GB-026739)
C03 (17.11.80) A23p

Solidified food prods. are prepd. from small pieces of the following process: (a) an aq. suspension of the chopped food is prepd. in a soln. of a water-sol. alginate (b) a weakly water-sol. Ca salt soln. is prepd. contg., as inhibitor, a sugar or a mono- or poly-hydric alcohol (c) the two solns. are mixed; and (d) allowed to gel.

Used as food for humans and animals. Presence of the inhibitor gives sufficient time for the prod. to be mixed uniformly, and the solidification time is constant for a given mixt., allowing automatic control of a continuous process. 31.7.80 as 884573 (17pp520)

ORAA- ★ D13 88392 C/50 ★BE-884-610
Dried colostrum - useful as a feed additive to increase wt. gain and appetite
ORAA 29.07.80-FR-016687 (03.08.79-FR-020015)
B04 C03 (01.12.80) A61k C07g

Dry colostrum extract is prepd. by pasteurising the colostrum, concentrating it to 250-400 g/litre, and dried to 200-250 g/litre of starting material. Colostrum is taken in the first days following the birth, from ewes, goats, asses, buffaloes and cows, and may be stored at 0-10°C. It is then pasteurised at 80°C and dehydrated in an evaporator. It may then be dried by lyophilisation or by inverse osmosis. The prods. may be subjected to a Maillard r action, giving a brown colouration caused by the redn. sugars by amino acids. Prod. may be treated with addi tives and vitamins, if desired. 1.8.80 as 884610 (9pp52

SATA- ★ D13 88415 C/50 ★BE-884-
Moisturising polished rice without risk of cracking grains - restricting moisture addn. rate to 0.3 per cent per hour of wt. of ri
SATAKE ENGG CO LTD 10.08.79-JA-101284
(01.12.80) A23b A23n

Process comprises contacting the grains of rice in an ai stream to which moisture is added continuously. Grains are gravity fed continuously through the air stream. Rat at which moisture is added to the air stream is proportional to the rate at which grains are introduced to the air stream. Moisture is injected at a rate not exceeding 0.3 by wt. of the quantity of polished rice grains processed per hour. This relationship must exclude inter-stage periods when no moisture is absorbed by the rice grains.

Used for increasing the moisture content of polished rice grains from about 13.5% to about 14.5%, which is re quired for optimum taste and prod. yield. Moisture cont ent increase is not achieved without risk of cracking and chipping the grains. 8.8.80 as 884693 (18pp448)

TOPP ★ D13 C/50 ★BR 7903-15
Compsn. for maintaining freshness of vegetables and fruit
TOPPAN PRINTING KK 21.05.79-BR-003158
(25.11.80) A23b-07/14

MICA/ ★ D13 C/50 ★CS 7901-262
Protibiotic additive for feedstuffs
MICAN P 26.02.79-CS-001262
C03 (29.08.80) A23k-03/02

JILE/ ★ D13 C/50 ★CS 7901-276
Biological sorbents prepn.
JILEK R 26.02.79-CS-001276
(29.08.80) A23j-01/18

CVAK/ ★ D13 C/50 ★CS 7901-564
Feedstuff additive - reducing concn. of chlorinated pesticides in dairy products
CVAK Z 08.03.79-CS-001564
C03 (29.08.80) A23k-01/16

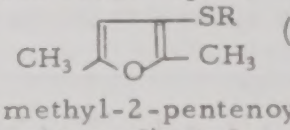
BRAN/ ★ D13 C/50 ★CS 7903-088
Feedstuffs preserving agent prepn.
BRANYIK A 04.05.79-CS-003088
C03 (29.08.80) C12n-01/04

MACH/ ★ D13 C/50 ★CS 7903-194
Silage material and/or feedstuff prepn.
MACHO V 10.05.79-CS-003194
(29.08.80) A23k-01/16

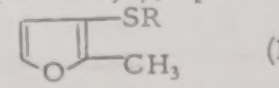
DAVI/ ★ D13 C/50 ★CS 7903-663
Ergotic wheat processing - for alcohol industry and feedstuffs use
DAVID F 28.05.79-CS-003663
C03 (D16) (29.08.80) C12p-07/06

INFL D13 14727 W/09 =DS 2437-890
Thiafuran and furanthiol flavouring agents for food - prepd. from 2-ene-1,4-diones and thiols and cyclisation of product
INT FLAVORS & FRAGR INC (INTF) 07.08.73-US-386453 (07.08.73-US-386450)
*E13 (04.12.80) *DT2437-890 A23l-01/22*

The following thiofuran cpds. are used as flavouring agent for food:- cpds. of formula (I) where R is acetyl, isobutyryl, 2-ethylbutyryl, 2-methylbutyryl, isovaleryl, octanoyl, benzoyl, propionyl, pivaloyl, hexanoyl, 2-methyl-2-pentenoyl, toluoyl, cinnamoyl or 2-methyl-2-pentenoyl); cpds. of formula (II) (where R is acetyl, isobutyryl, 2-ethylbutyryl, 2-methylbutyryl, isovaleryl, octanoyl or piva-



(I)



(II)

loyl); 3-thioacetylfuran, 2-methyl- or 2, 5-dimethyl)-3-(2-thiofuroyl)furan, 2, 5-dimethyl-4-thyl-3-thioacetylfuran and 2-propyl-3-thioacetylfuran.

The pcds. may be used to flavour beef soup, chicken soup, instant vanilla pudding, etc. 6.8.74 as 437890 Div. n 2462673 (+7.8.73-US-386451) (16pp068)

WIEN/ ★ D13 88550 C/50 ★DT 2921-936

Swelling and softening biological prods. e.g. potatoes - using microwave or infrared and precooking stage

WIENEKE F 30.05.79-DT-921936

(04.12.80) A23l-01

Swelling and softening of H_2O-contg. biological prods., e.g. potatoes, using microwaves or infra-red radiation, comprising a precooking stage. Pref. the prods. are in the form of thin sheets. The process gives improved swelling and softening. 30.5.79. as 921936 (3pp903)

STEL- ★ D13 88564 C/50 ★DT 2922-263

Mixing plant for milk mixts. - having two different elements of different speeds mounted on beam or plate above mixing vessel which is raised and lowered by hydraulic lift

FA STELZER E 31.05.79-DT-922263

(04.12.80) B01f-13

Mixing system has a number of individually driven mixers mounted on a plate or carrier. This carrier is raised and lowered by means of a hydraulic cylinder and it can be rotated. The vessel or container for the material to be mixed esp. milk products is placed on the base. The carrier is rotated and the required agitator lowered into the vessel. Thus various degrees of agitation can be achieved by having high speed, high shear mixers or low speed, gentle mixers.

Used. esp. for mixing milk products. Allows rapid and easy changes of agitator type, with the agitator being rapidly available after any change. 31.5.79. as 922263 (18pp1053)

KOPP- ★ D13 88609 C/50 ★DT 3008-503

Moulding croquettes - using machine which feeds doughy material into gaps between pairs of coaxial reciprocating rams and cuts off (NL 25.11.80)

KOPPENS MACHINEFABR 23.05.79-NL-004048

(04.12.80) A21c-05/02 B29b-01/02

Sticks, croquettes etc., partic. of edible material, are produced from doughs in equipment whose inlet passage has a ram which moves between a position filling the passage and an outer position; a second ram moves between the passage and another outer position and is aligned with the first ram. The ram drivesmove the second in the same direction as the first but only after an interval.

The appts. is of simple design to obtain uniform prodn. 5.3.80. as 008503 (12pp1007)

ENIE- ★ D13 88671 C/50 ★DT 3020-075

Coagulation of milk - using aq. polymer soln.

ENI ENTE NAZ IDROCA 29.05.79-IT-023079

A97 (04.12.80) A23c-07 A23c-19/02 A23j-01/20

Coagulation of milk is effected by treating with an aq. soln. of a polymer (I) having a net positive charge at a pH of ≥ 5, pref. a chemically modified protein, a synthetic polyamine or a suitable natural protein.

Process gives high ($\geq 90\%$) yields of coagulated proteins under mild conditions without acidulation; the coagulum has a very short syneresis time, thus allowing the process to be operated continuously. Coagulated milk proteins are used, e.g., in the foodstuffs, plastics, paint and adhesives industries. 27.5.80. as 020075 (23pp)

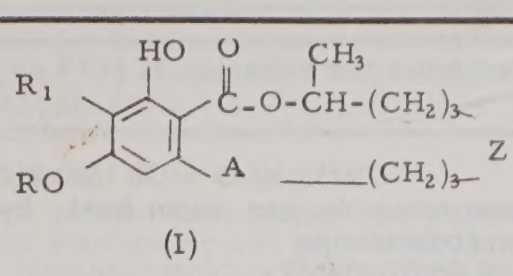
INTM ★ D13 88682 C/50 ★DT 3020-470

Animal growth promoter zearalin derivs. - prepd. by reaction with allyl halide and opt. Claisen rearrangement and/or hydrogenation of the resulting 4-o-allyl cpd.

INT MINERALS & CHEM CORP 30.05.79-US-043801

B02 C02 (04.12.80) A23k-01 C07d-313

New lactone derivs. are cpds. of formula (I):

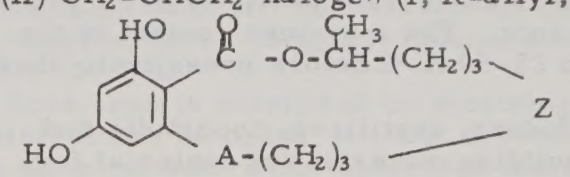


(I)

(where A is CH_2CH_2 or CH=CH; Z is CH_2, CO or CHOH; and one of R and R_1 is H and the other is allyl or propyl).

(I) are zearalin derivs. with growth stimulant and promoting activity in animals such as ruminants and poultry. They may be administered orally (e.g. by injection or as a subcutaneous implant).

(I) are prepd. by reacting (II) with allyl halide (III) and opt. heating to give a Claissen rearrangement and/or (II) CH_2=$CHCH_2$-halogen (I; R=allyl, R_1=H)



Cpds. (I)in which R or R_1 is propyl are in general obtainable by low-pressure hydrogenation of corresponding cpds. in which R or R_1 is allyl. 29.5.80. as 020470 (19pp280)

ROBO/ ★ D13 88694 C/50 ★FR 2450-053

Transfer mechanisms to load and discharge Camembert salting machine - automatically de-stacks and reloads standard carrier trays

ROBOUAM F 27.02.79-FR-005578

P13 (31.10.80) A01j-27

The feed and discharge ends of the machine are now equiped with automatic transfer mechanisms at the feed end, standard carrier tray stacks of cheeses are automatically picked down to a single cheese layer which is gently advan-ced towards the machine infeed belt via an elevator with guide fingers.

At the delivery ends of the machine, a line of salted cheeses rolls into a slot in a rotor on a horizontal axis. The rotor has eight, evenly spaced slots and automatically rotates one eighth of a revolution each time a slot is filled with cheeses.

The previously filled slot then delivers a number of cheeses in line abreast, ready for feeding directly on to a standard carrier tray.

In the parent patent, the cheeses are presented to the machine; stacked on carrier trays. After salting, the cheeses are delivered by the machine in single file, rolling on edge.

The automatic transfer mechanisms. are both labour saving and instrumental in reducing transfer damage to delicate cheese. 27.2.79 as 005578 (9pp448)

JULI/ ★ D13 88698 C/50 ★FR 2450-065

Extending shelf life of cheese having surface coating of nuts, etc. - by removing peel from nuts prior to application to cheese

JULIEN A E E 27.02.79-FR-005039

(31.10.80) A23c-19/14

The nuts are now peeled before being applied to the cheese Pref. after peeling and prior to application, the nuts are roasted to give them a colour similar to their colour before removal of the peel.

The peel can be removed by mechanical abrasion or by soaking the nuts in a liq. which detaches the peel by blistering. 27.2.79 as 005039 (4pp448)

BERT- ★ D13 88699 C/50 ★FR 2450-067

Industrial cryogenic shelling of cashew and similar nuts - in which freezing and hammering are adjusted to suit narrow size range of nut

BERTIN & CIE (REFR-) 01.03.79-FR-005315

(31.10.80) A23n-05/08

Process comprises pretreating the nut to make the shell more fragile by moistening, steaming and drying. The pretreatment is preceded by size-grading the nuts by dia. and followed by size-grading the nuts according to length. The twice-graded nuts are then processed in partic. size ranges.

The nuts are plunged in succession into a bath of liq. air. Each frozen nut is then hammered to smash the shell

which is mechanically sorted from the kernels. 1.3.79 as 005315 (20pp448)

GERK D13 79455 Y/45 =GB 1580-912

Sheet material prepn. from beet root pulp, esp. sugar beet - by milling, drying, adding water and calendering

GERLACH CHEM GMBH 27.07.76-DT-633659

*C03 + P15 Q43 (D17) (10.12.80) *BE-856-573 A23b-04/04 A23k-01 C05c-01 C05f-11 D06n-07*

Mfr. of a multi-purpose sheet (I) comprises pressing to sheet form, in the presence of water, material derived from the root of a plant of the type Beta Vulgaris. Pref. the material is derived from at least partially dried pieces or fresh pieces of the root. The moisture content of the material is adjusted to 25-50wt.% before pressing to sheet form.

(I) is used e.g. as fodder, fertiliser, foodstuffs and semi-luxury prods., building material and material for the paper industry. 25.7.77 as 031129. (5pp982)

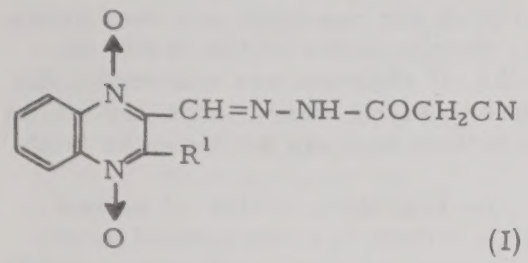
SPOF D13 14438 B/08 =GB 1580-998

2-Formyl-quinoxaline-1,4-di:oxide-cyano-acetyl hydrazone derivs. - are antimicrobials with coccidiostatic properties and growth stimulators for domestic animals such as pigs

SPOFA SPOJENE FARM NP 02.08.77-CS-005118

*B02 C02 (10.12.80) *DT2829-580 A61k-31/49 C07d-241/52*

2-Formylquinoxaline-1,4-dioxide cyanoacetylhydrazone derivs. of formula (I) are new. R^1 is H or 1-4C alkyl, pref. H or Me. (I) are prepd. by reacting cyanoacetylhydrazine (H_2N-NH-$COCH_2CN$) with the appropriate 2-formylquinoxalin-1,4-dioxide (or its acetal deriv.) in an inert (in)-organic solvent or diluent (mixt.) at 0°C-b.pt. of the reaction mixt., or a reactive deriv. of cyanoacetic acid (cyanoacetyl chloride or cyanoacetic acid ester) with the appropriate hydrazone deriv. at -20 to +100°C.



(I)

(I) possess Gram positive and negative antimicrobial action. (I) also show anticoccicidal properties, promote growth in farm animals and favourably influence their health. 31.5.78 as 025379. (6pp965)

SCHA/ D13 12320 A/07 =GB 1581-281

Feed or feed additives for cattle from agricultural waste - both structured and non-structured, esp. straw and whey

SCHANZE R 18.08.77-DT-737295 (24.09.76-DT-643093)

*C03 (10.12.80) *BE-859-010 A23k-01*

Feedstuff or feedstuff additive (I) based on solid, structured, agricultural by-prods. comprises (a) ⩾1 of leguminous straw, maize columellae, maize-husk-spadix grist, fodder cereal mixt., chaff and capsules from flax, citrus fruit peel, banana peel, fruit residues, malt sprouts or pref. cereal straw; (b) ⩾1 digestible non-structured by-prod. and residue with nutrient value comprising whey, protein-enriched residues from milk treatment, molasses residue spent washes or vinasse, α-celluloses, starch, brewers' yeast or grains or other brewing, distillary or fermentation residues, dregs and kieselguhr residues, or chitin. Pref. (b) is whey and (I) also contains (c) opt. amt. residual moisture.

(I) is easily produced from readily available prods. and gives optimum utilisation by cattle. 23.9.77 as 039790. (12pp918)

WILL/ D13 45906 A/26 =GB 1581-318

Mixer extruder unit for shaped pieces of dough - makes croquettes and french fried potatoes, etc. from powder

WILLEMSEN W H 09.08.77-NL-008771 (22.02.77-NL-001870)

*P28 (10.12.80) *BE-864-133 A21c-11/18 B01f-15/02 +B01f-07/20*

French fries on other products for frying are shaped using appts. by forcing a powder/liquid through a nozzle at the end of a cylinder by piston action. A mixer is located above the piston and a valve allows the mixture to pass from above to below the piston when the piston is raised. The extruded dough is cut below the nozzle.

Products can be quickly formed. 10.2.78 as 005455. (6pp1376)

AJIN D13 75344 A/42 =GB 1581-31

Liq.seasoning compsn. prepn. - by suspending vegetabl proteinaceous material in amino acid soln., opt. regulating pH removing sediment and refining

AJINOMOTO KK 24.02.77-JA-019665

*(10.12.80) *J53104-770 A23l-01/22*

New amino acid contg. seasoning (I) is produced by using an acidic aq. amino acid soln. (II) of pH < 6.0 to extract acid-soluble material from vegetable protein. (II) is obtd by acid-catalysed hydrolysis of vegetable protein; sepg. the acid aq. soln. from the vegetable protein residue, adjusting the pH of the sepd. acidic aq. soln. and removing the resulting lees.

Pref. the vegetable protein used to obtain (I) and (II) is defatted soyabean, wheat or corn gluten, cotton-seed refuse or defatted rice bran refuse. Pref. the extraction is done at a pH < 1.0 and a temp. of 10-60°C.

The quality of (I) is improved over prior art seasonings purificn. needed is minimal and less waste is produced. 15.2.78 as 006073. (7pp918)

RUPE- D13 19976 B/10 =GB 1581-322

Contacting raw battered food prods. with carbon di:oxide snow - to set uncooked batter to non-flowing condition by temp. redn.

RUPERTS CERTI-FRESH 09.05.77-US-795118

*(10.12.80) *US4142-001 +A23l-01*

Liquid batter is applied to a food product and then placed on a CO_2 snow layer to rapidly freeze the batter.

Pref. the food prod. is pre-cooled or frozen. Additional CO_2 snow is pref. sprayed onto the prod.

Prod. is not partially cooked before eventual cooking. 28.4.78 as 017092. (6pp1376)

SHAW- ★ D13 88748 C/50 ★GB 1581-339

Food substances prepn. for pickling - by pretreatment with an inorganic acid

SHAWS HUDDERSFIELD 10.07.76-GB-028783

(10.12.80) A23b-07/10

Food substances (I) are prepd. for pickling by treatment with an inorganic acid.

Inexpensive method effectively controls the growth of microorganisms on a variety of (I) (onions, gherkins, etc.) prepd. for pickling, and also improves the odour, taste, or appearance of the finished food prod. 10.7.76 as 028783. (3pp478)

MALO- ★ D13 88755 C/50 ★GB 2048-048

Potato chip - with at least five:sided cross/section for less fat pick/up and less sticking together

MALORDEAN LTD 09.05.79-GB-016111

(10.12.80) A23l-01/21 A23p-01

Chip has a cross-section with ⩾5 sides, pref. hexagonal. Chip thickness is pref. $^1/_8$-$^3/_4$ inch and length ⩾ $^1/_2$ inch. Arrangement reduces surface area compared to square or rectangular section chips so that less fat or oil adheres and the chips are less likely to stick together. Chip may be cut from whole potato or formed from reconstituted potato. 9.5.79 as 016111. (2pp1358)

ISHI/ ★ D13 89047 C/50 ★J5 5138-368

Old rice treatment - comprising washing with water, immersing in soln. contg. mould enzymes, washing and boiling

ISHIDA Y 18.04.79-JA-046730

(D16) (29.10.80) A23l-01/10

Method comprises (a) washing old rice, rice with water; (b) immersing in soln. of pH 4.0-5.5 which contains enzymes e.g. cellulase, hemicellulase, protease pectinase, obtd. from moulds, at 20-50°C for 30-60 minutes; (c) washing with water; and (d) boiling.

During storage of rice hydrolysis and oxidn. of neutral lipids, reaction between oxidised lipids and proteins, reac-tion between fatty acids and starch, hardening of cellular

mbrane, etc. occur. As a result carbonyl cpds. which volatile and have umpleasant smell are formed and ter-absorbing properties of the rice on boiling is re-ced. Enzyme compsn obtd. from moulds such as Asp-gillus, Rhizopus, Trichoderma, contains cellulase, micellulase, protease, pectinase, α-amylase, glucoamy ase transglucosidase, etc. and removes volatile sub-ances and softens the cellular membrane. Enzyme treat ent must be at pH 4.0-5.5.

Specific odour of old rice is removed and cellular mem-ane softened. Ordourless boiled rice excellent in texture d flavour is obtd. Boiled rice is less broken under re-rt processing at high temp. and pressure compared with w rice and is used for instant rice. 18.4.79 as 046730 pp5)

KK ★ D13 89048 C/50 ★J5 5138-371

avouring compsn. prepn. - by mixing difficultly water-soluble avour with soln. contg. water soluble sugar and water-soluble otein

KIKKOMAN SHOYU KK 17.04.79-JA-046055

(29.10.80) A23l-01/22

repn. of a liq. or pastry water-dispersible flavouring ompsn. co ntg. water difficult soluble flavour comprises ding water insoluble flavour inthe mixed soln. contg. 30 wt.% of water soluble sugar andabove 0.8 wt.% s water soluble nitrogen) of water soluble protein.

Water difficulty soluble flavour can be made water spersible with sugar and protein and obtd. dispersion as stability similar to a soln. Thus it can be used as avouring for aq. solution, watery foods, etc.

As the difficultly water soluble natural or synthetic avour, e.g. orange oil, lime oil, lemon oil, cinnamic ldehyde, linalol, etc. can be used. Usually the mixed olution is so prepared that it has sugar concn. 50-80 wt.% nd soluble nitrogen concn. 1.0-2.0 wt.% andthe flavour s added so that the flavour concn. in compsn. is 10-50wt.% 7.4.79 as 046055 (5pp5)

TAT/ ★ D13 89185 C/50 ★J5 5139-315

table emulsion for use in salad dressing and cake preservative - omprises vegetable oil, water, organic acid, sucrose and surfactant

OTAT 16.04.79-JA-046265

(31.10.80) A61k-07

mulsion has soft sweetness and sourness and due to the ynergic effect of the components, it has good stability, reezing stability and preservative properties.

Usually sucrose is combined >1% (pref. 5-70%) and ucrose-fatty acid ester, glygerin fatty acid ester, orbitan fatty acid ester, lecithin, etc. can be used singly r together as surfactant with >0.01% (pref. 0.1-3%) -80% Vegetable oil is used and oxy-acids can be used as rganic acids, used at >0.01% pref. 0.05-20%. It is des-rable to combine ethanol> 0.01% pref. 0.01-10% to in-rease advantages. It can be prepd. simply by mixing the omponents, it is pref. to heat-sterilize the mixt. at 70-00°C for several seconds-tens of mins. homogenising it nd cooling it to <10°C for increasing above advantages urther. When the emulsion is impregnated in sponge akes, they can be preserved well. 16.4.79 as 046265 2pp5)

UGY D13 07552 A/04 =J8 0044-586

Biologically-active, raw soybean powder prodn. - by mashing the bean in water, adding saccharified starch prod. and spray-drying

SUGIYAMA SANGYO KAG 04.06.76-JA-065256

*(13.11.80) *J52148-648 A23l-01/20*

The method comprises immersing raw soybean in water, mashing it without inactivating the biologically active sub-tances in it, adding saccharified prod. of starch, having DE-5-30, to the mash, keeping the mixt. at 30-60°C. for .5-5 hrs., and spray-drying it. The powder showing has ood preservation, handling property, can be prepd. easily nd economically, and can be used as the crude material or various biologically-active substances.

The addn. of saccharified prod. of starch forms a large mt. of maltose with α-amylase, thus the spray-drying an be practiced easily and the activity of biologically active substances can be maintained. 4.6.76 as 065256, A231-1/20 (13.11.80) SUGIYAMA SANGYO KAG (4pp) (J52148648)

NAGA- D13 28590 B/15 =J8 0044-587

High protein food prepn. - by pasteurising koji with aq. ethanol soln. then mixing with steamed soya bean and maturing

NAGANO MISO KK 02.08.77-JA-092183

*(13.11.80) *J54028-838 A21d-02/36 A21d-13/06 A23c-15 A23c-19 A23g-03 +A23l-01/20*

The method comprises pasteurising 'kofi' with alcohol or aq.methanol soln. mixing with steamed soya bean and mat-uring the mixt. Aq. ethanol soln. having ethanol concn. > 15% can be used and inactivation of enzymes in 'kofi' can be suppressed by using aq. ethanol soln.having ethanol concn.> 55%.

Soya bean is sterilised by steaming and proteinous food material can be prepd. without depending on the pasteuris-ing effect of salt. Thus obtd. food material can be used for prepg. various foods having low salt concn. such as 'miso' mayonnaise, sauce, spread, soup, break, confectioneries, etc. 2.8.77 as 092183, A231-1/205, A21d-2/36,13/06, A23c-15/00,19/00,A23g-3/00 (13.11.80) NAGANO MISO KK (12pp) (J54028838)

URAS- D13 37888 B/20 =J8 0044-588

Natural flaky seasoning - prepd. by soaking a dry flaky mixt. of natural seasonings in a soln. of chemical seasoning, e.g. sodium glutamate, and drying

URASHIMA NORIKK 09.09.77-JA-109215

*(13.11.80) *J54044-073 A23l-01/22 +A23b-04/04*

A natural flaky seasoning (I) is prepd. by (1) soak or spray or highly concn.or dried flaky mixture of natural season-ing (II), which is prepd. from dried bonito meat, shittake mushroom, parched small sardine, dried cuttlefish and shellfish, into a soln. contg. ≥ 1 chemical seasoning (III) such as sodium glutamate, sodium inosinate, sodium guan-ylate, sodium succinate, sodium asparginate and salt and (2) drying the mixture.

(I) has natural flavour and taste of (II) and high season-ing effect of (III). 9.9.77 as 109215, A231-1/226,A23b-4/04 (13.11.80) URASHIMA NORI KK (3pp) (J54044073)

SUNF- D13 34452 A/19 =J8 0044-589

Pasty seasoning contg. poly:ol sweetener - prepd. by mixing sugar-free mash with e.g. sorbite or xylite and alcohol

SUN FOODS KK 09.09.76-JA-107253

*(13.11.80) *J53034-964 A23l-01/23*

Pasty seasoning (I) is prepd. by mixing mash (II) almost free from sugars, and sweet polyalcohol (III) such as sor-bita, xylite, and glycerol. Seasonings (IV) may be mixed with (II) and (III). (I) contains 10-60 wt % (III) and 8-20 wt % alcohol (V).

(II) is mash of chinese and/or Japanese liquors. Ethyl alcohol and other liquors, such as rum, brandy, whisky etc. should be added to (I) to control the (V)-content. (IV) is e.g. glycine,alanine, sodium glutamate, protein decom-posed prod. organic acid and salts of organic and/or in-organic acids.

(I) may be easily mixed with food materials.9.9.76 as 107253. A231-1/23 (13.11.80) SUN FOODS KK (3pp) (J53034964)

NODA ★ D13 89326 C/50 ★J8 0044-590

Molecular sieving soya sauce to improve colour stability - by removal of substances of mol. wt. 270-500

NODA INST SCI RES 26.03.75-JA-035319

(13.11.80) A23l-01/23

Soya sauce, with or without heat treatment, is subjected to treatment with molecular sieve, whereby substances of molecular weight of 270-500 are removed from the soya-sauce. The colour stability of the soya sauce is improved. 26.3.75 as 035319, A231-1/238 (13.11.80) NODA INST. SCI. RES. (5pp22) (J51112597)

HAYB ★ D13 89352 C/50 ★J8 0045-166
Egg storage - by coating shell of egg with mixt. of pullulan or pullulan ester or ether
HAYASHIBARA BIOCHEM 03.03.73-JA-025442
(17.11.80) A23b-05/06

Outer surface of shell of egg is coated with a coating agent contg. pullulan or pullulan ester or ether, so storage stability of egg is improved without damage of properties and taste of egg. 3.3.73 as 025442, A23b-5/06 (17.11.80) HAYASHIBARA BIOCHEM. (6pp22) (J49110861)

NISW ★ D13 89353 C/50 ★J8 0045-168
Soybean milk beverage prepn. - by heating defatted beans, acidifying, reacting with acid protease, centrifuging, reacting with peptidase, and mixing with sugar, acid etc.
NISSHIN OIL MILLS KK 17.01.72-JA-006209
(17.11.80) A23c-11/10

Defatted soybean is heated, acidified with organic acid, reacted with acid protease, centrifuged to give supernatant, and the supernatant is further reacted with peptidase, and the resultant is mixed with sugar, organic acid, flavour etc. to give soybean milk beverage. 17.1.72 as 006209 A23c 11/10 (17.11.80) NISSHIN OIL MILLS KK (2pp22)(J48075759)

FOOD- D13 14427 T/09 =J8 0045-170
Solid product prepn from maize syrup - of high fructose content used in baking ice-creams etc
FOOD TECHN INC (FOO -) 20.08.70-US-065737
*(17.11.80) *BE-771-409 +A23l-01/09 C13k-11*

Solidified product stable to moisture, for use in the manufacture of breads, cakes, pastries, ice-creams, etc. is obtained as a free-flowing powder, having a dry appearance and being free from gummy, dusty and granular characteristics, and comprises 40-70 pts.maize syrup solids of high fructose content, 60-30 pts.partially gelatinised starch having a gelatinisation temp. of at least 65°C 0-60 pts. honey solids, 0.5-4 pt.water, 0-1 pt. emulsifier e.g. hydroxylated lecithin, 0-1 pt.of an anti-humectant, e.g. calcium stearate. 11.8.71 as 060355 (clg.20.8.70-US-065737) A23l-1/09, C13k-11/00 (17.11.80) FOOD TECHNOLOGY, INC. (8pp) (J47005262)

AJIN ★ D13 89354 C/50 ★J8 0045-171
Mfg. soybean curd of enhanced structure and taste - by adding calcium or magnesium salt of L-glutamic acid, 5'-inosinic acid or 5'-guanylic acid to soybean milk
AJINOMOTO KK 14.07.73-JA-078936
E12 (E11) (17.11.80) A23l-01/20

In the prepn. of soybean curd calcium or magnesium salt of L-glutamic acid, 5'-inosinic acid or 5'-guanylic acid is added to soybean curd of homogeneous structure and improved taste is obtd. 14.7.73 as 078936, A23l-1/20 (17.11.80) AJINOMOTO KK (2pp22) (J50025749)

TAIC ★ D13 89355 C/50 ★J8 0045-173
Prepn. of devil tongue - where xanthan gum is added to give high gel strength and touch and taste
TAIYO CHEMICAL IND KK 15.11.71-JA-091312
(17.11.80) A23l-01/21

In prepn. of devil tongue (Konnyaku) after conventional manner, xanthan gum is added to the devil tongue. Devil tongue having high gel strength can be obtained and touch and taste of devil tongue can be improved. 15.11.71 as 091312, A23l-1/212 (17.11.80) TAIYO CHEM.IND. KK (3pp26) (J46056846)

HAGI/ ★ D13 89356 C/50 ★J8 0045-176
Improving nutrient value of beverages, bread, cakes etc. - by adding prod. obtd. by decomposition of egg of fowl
HAGIWARA Y 07.10.71-JA-078335
(D11) (17.11.80) A23l-01/30

Prod. which is obtd. by decompsn. of egg shell of fowl is added to beverages, bread, cakes etc. to improve, nutrient value, taste and flavour. 7.10.71 as 078335, A23l-1/30 (17.11.80) HAGIWARA Y (5pp22) (J48040949)

PFIZ D13 45702 B/25 =J8 0045-
Erythorbic and ascorbic acid 6-fatty acid mon:ester prepn - reaction of fatty acid and 6-hydroxy-acid using at least 10 mole anhydrous hydrogen fluoride
PFIZER INC 16.12.77-US-861506
*B03 E13 (18.11.80) *BE-872-796 C07d-307/62 +B01j-27/12*

Process for prodn. of a fatty acid ester in posn. 6 erythorbic (I) or ascorbic acid (II) by contacting (I) or (II) with a 12-18C satd. fatty acid in the presence of at least 10 mol of anhydrous hydrogen fluoride per mole of fatty acid and maintaining the contact of HF with the reactants until mo -esterification is achieved.

The 6-fatty acid esters of (I) and (II) are useful as antioxidants for foods having a high concn. of fatty materials. The esters have better solubility in fats and oils than the free acids and the same anti-oxidant properties. The ascorbic acid ester may also be used as a source of vitamin C. Known process for prodn. of esters uses concentrated sulphuric acid as catalyst and solvent with an excess of one reactant but gives a yield of only 50%. The present pr -cess allows reactants to be used in stoichiometric quantities and gives yields of about 60-95%. 14.12.78 as 154568 C07d-307/62, B01j-27/12 (18.11.80) PFIZER INC. (4pp) (J54088261)

DMVC- ★ D13 89417 C/50 ★NL 8004-76
Whipping cream contg. mono-glyceride lactate(s) - from milk, a surfactants, giving unlimited storage time
DMV CAMPINA BV 22.08.80-NL-004765
(28.11.80) A23c-13/14

Whipping cream and whipping creams prods. which can be beaten and have an increased content of surfactants are prepd. by (a) sepg. butter fat and lactic acid from milk or milk prods. and prepg. from them surface-active lactic acid esters (I)of monoglycerides or mixts. of (I) with monoglycerides; (b) adding these surfactants to butter fat and (c) emulsifying the fatty mixt. in a soln. contg. milk protein and lactose.

All the cream components are derived from milk, but in the dry form the cream keeps indefinitely and its availability is not limited by seasons or regions. The components can be bought when the price is low and are cheap to transport. The cream can be whipped to a higher degree than conventional cream and does not separate out. The fat content can be varied over a wide range, e.g. 5-40 % or more. 22.8.80 as 004765 (8pp510).

EMEL/ ★ D13 89480 C/50 ★SU-730-335
Protective coating on eggs for storage - formed by immersion in hydrogen peroxide soln. and then in calcium hydroxide suspension
EMELYANOV B V 11.09.78-SU-664024
(30.04.80) A23b-05/06

Eggs can be provided with a protective coating by immersing them in an aq bath contg. 2.5-5 wt.% of H_2O_2 for 5-7 min and then(for e.g.5 mins) in an aq uspension of 7-10 wt.% $Ca(OH)_2$. Both the aq media have a temp of 20-25°C.

By this method, storage of eggs can be extended 1.2-1.6 times without affecting their teste. This process is simplified compared with the known method and the cost is reduced by 2-3%.
Emelyanov, B.V., Krivoshipov, I.P., Bul.16/30.4.80. 11.9.78.as664024(2pp70).

DAUG= ★ D13 89481 C/50 ★SU-730-336
Lactic flora bacterial starter for cheddar-type cheese mfr. - contg. separately cultivated mesophilic lactic streptococci and thermophilic lactic bacilli
DAUGAVPILS MEAT (LMEA=) 18.09.78-SU-665455
(D16) (30.04.80) A23c-19/02

Milk souring Bacterial culture for the prodn. of cheddar type cheeses from skimmer milk contain, according to the Parent Patent No 448222, separately cultivated mesophilic lactic acid streptococci(including)Str cremoris Str lactis and, in addition Str diacetilactis and Str.acetonicus)and thermophilic lactic acid bacilli(including Str.casei, Lb bulgaricum and Lb helveticum).

The cheddarisation process is accelerated more than

times by using equal amts of the mesophilic lactic acid reptococci and thermophilic lactic acid bacilli. The con- of Streptobacterium casei is 0.23-0.28% Lactobacter- m helveticum 0.34-0.42% and Lactobacterium balgari- um 0.33-0.40%.

oridzane, S. M., Golde, H. P., Leitis, A. Ya., et al ul. 16/30.4.80.18.9.78. as665455 Add to 448222(2pp).

MSU= ★ D13 89482 C/50 ★SU-730-337

rotein-rich milk product - esp. for persons suffering from ancreatitis

A MED NUTRITION 27.04.78-SU-609602

(02.05.80) A23c-11 A23j-01/20

rotein-rich milk based nutrient product, esp. for per- ons suffering from pancreatic disorders contains(in wt.) casein 12.7-15.5 plain cow milk 20.5-25.1, cream 40% fat)5.0-5.6, maize oil 2.9-3.5, saccharose 3.6- .4 trisodium citrate 0.91-1.11, tripotassium citrate .81-0.99, trimagnesium citrate 0.26-0.32, $NaHCO_3$ .44-1.76 iron glycerophosphate 0.36-0.44, whey pro- eins 12.7-15.5, lecithin 0.6-0.8; the balance is skim- ned milk.

The compsn contains also(in mg %) water-soluble vit- mins, in particular folic acid 0.27-0.33, thiamins 1.26- .54 riboflavin 1.08-1.32, pyridoxin 1.62-1.98, niacin .25-13.75, ascorbic acid 63.0-77.0 and oil-soluble vit- mins(in mg %) phylloquinone 1.50-1.84, retinal 1.53- .87, ergo-caldipherol 0.027-0.033, tocopherol 2.7-3.3.

Iesterin, M. E., Korobkina, G. S., Levachev, M. M., et al ul. 16/30.4.80.27.4.78. as609602(3pp70).

MSU= ★ D13 89483 C/50 ★SU-730-338

lutritive-medicinal compsn. for tube feeding - contg. homogenised ilk, meat and vegetable prods., sugar, vitamin(s), iron, citrate i:carbonate, salt, oil, starch, fruit juice etc.

A MED NUTRITION 27.04.78-SU-613647

B05 (04.05.80) A23c-11 A23j-01/20

Nutritive-medicinal compsn esp suitable for stomach ube feeding contains(in wt. %) plain cow milk 8.4-10.3, kimmed cow milk 2.7-3.3, cream(30% fat) 1.7-2.1, cas- iin 1.1-1.3, cream butter(unsalted)2.7-3.3, vegetable il 1.4-1.7, melange 7.1-8.7 blanched and homogenised beef-veal mixt 4.0-4.8, blanched and homogenised altry meat 4.2-5.1, semolina 3.2-4.0, oat flour or uckwheat or rice or oatmeal 2.0-2.4, wheat flour 0.05- ..06, starch 2.0-2.4 blanched mixt of vegetables contg. otato 9.0-11.0, carrot 1.6-1.9, pumpkin 14.3-14.5, arsley and celery green 0.2-0.3, white root 0.4-0.5, mion 0.3-0.4, salt 0.1-0.2, sugar 8.8-10.7, trisodium itrate 0.08-0.1, tripotassium citrates 0.07-0.09, tri- nagnesium citrate 0.03-0.04, $NaHCO_3$ 0.06-0.08, iron llycerophosphate 0.05-0.07, the balance is apricot juice.

The compsn contains also water soluble vitamins(in ng%) thiamine 0.14-0.16, riboflavin 0.18-0.22, pyri- esterin, M. F., Korobkina, G. S., Levachev, M. M., et al ul. 16/30.4.80.27.4.78. as613647(4pp70).

OTA= ★ D13 89484 C/50 ★SU-730-339

ranulated dry mashed vegetables e.g. potatoes - prepd. by ooking potatoes, freezing before granulation and de-freezing efore drying

POTATO PRODS RES 13.04.78-SU-606877

(30.04.80) A23l-01/21

nstant granulated dry mashed potatoes or other vegetab- es e.g. carrots, beets etc and prepd by washing potatoes leaning, cutting, cooking, comminuting with formation f strands, cooling them, granulating and drying.

This process is improved by freezing the cooled trands before the granulation and defreezing the granules efore drying.

The quality of the prod is improved, the content of the ee starch is reduced and any further culinary processing s accelerated using the above process.

aletskii, V. N., Kovganko, R. L., Zaletskaya, B. G., et al ul. 16/30.4.80.13.4.78. as606877(2pp70).

AKGO= ★ D13 89663 C/50 ★SU-730-692

Cellulose powder prepn. - by Lewis acid soln. treatment in neutral or protonic organic solvent, is intensified by controlling temp. and duration

AS KIRG ORG CHEM 16.06.77-SU-496369

A11 B04 J01 (30.04.80) C08b-01

Cellulose powder used in analytical chemistry and in foodstuff, pharmaceutical and specialised cellulosic de- rivs mfr is prepd by impregnating cellulose with 0.1-1% Lewis acid soln in neutral or proton-donating organic solvent at room temp before washing and drying.

The method gives increased efficiency and intensified process by treating the impregnated cellulose at 70-100°C for 60-180 mins.

Sarybaeva, R. I., Vasilkova, T. V., Bul. 16/30.4.80. 16.6.77. as496369(3pp114).

DARI- ★ D13 89873 C/50 ★US 4235-578

Appts. for moulding provolone cheese loaves - forces cheese upward into transparent cylinders with reciprocating slide to direct cheese supply

DARI-DESSERTS INC 01.09.78-US-939041

(25.11.80) B29j-01

An apparatus for moulding provolone cheese includes a fixed horizontal table provided with a singular circular ho- le from which a chute depends. Warm cheese is pressed upwardly through the chute and discharged through the hole A slide can reciprocate horizontally across the surface of the table. This has a row of circular holes for selective alignment with the hole in the table.

Chesse forming tubes of a lightweight, light-transmitt- ing material, are mounted on the slide to receive the chee- se, Each tube includes a plunger of contrasting colour slidable within the tube. During filling of a tube the plunger rises to visually indicate the level of the cheese. The tubes are releasably clamped so that they may be removed sub- sequent to the shifting of the slide to cut off a filled tube. from the cheese supply.

The resulting loaves are uniform in content and weight and have flat ends. 1.9.78 as 939041(9pp295)

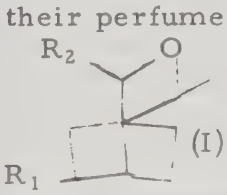
INFL ★ D13 89932 C/50 ★US 4235-729

Augmenting perfume aroma of fabric softener compsns. - by addn. of 1-methyl-3-hydrocarbyl-2-oxa-bi:cyclo (2.2.2)-octane

INT FLAVORS & FRAGR INC 27.06.79-US-052335 (20.10.78-US-953128)

B03 E13 (25.11.80) A61k-07/46 C11d-03/20

Fabric softener compsns. and fabric softener articles have their perfume aroma augmented or enhanced by addn. to the coupsn. or to the article coating of a bicyclo octane of formula (I). Either R_1 is H and R_2 is n-pentyl; or R_1 is Me and R_2 is allyl or EtCHMe.



(I)

(I) enhance the sweet, green, anisic, natural sweet warm herbaceous, clean herbaceous, minty. camphoraceous, black pepper, canvone, tagette and basil aroma characteristics of the compsn. and the treated arti- cles. (I) are obtd. by cyclisation of corresp. 1-methyl-3-R_1-4-(R_2-CHOH)-cyclohexene cpds. e.g. as described in US4195099.27.6.79 as 052335 Div. ex. 4197328, C.i.p. 4195099(+2.2.79-US-008924)(22pp1248)

CAZA/ ★ D13 89941 C/50 ★US 4235-750

Storage of harvested crops - in presence of adsorbents to remove ethylene, carbon di:oxide and excess water

CAZALET M F 07.03.79-US-018117

(25.11.80) B01j-21/08

Maturation and decay of harvested fruit, vegetables and flowers etc. is inhibited by placing them in a container hav -ing means for holding four gas adsorbents:-(I) a granular adsorbent of surface area $\geqslant 350m^2/g$ impregnated with a permanganate salt;(II) a granular adsorbent of surface area $\geqslant 1450m^2/g$ including active C; (I) silica gel of surface area $850m^2/g$;(IV) an adsorbent or CO_2, having a surface area of $\geqslant 350m^2/g$ and including a molecular sieve.

The container provides ideal conditions for storage and transport. The accumulation of ethylene, CO_2 and excess water is prevented. 7.3.79 as 018117(7pp955)

NATW D13 63459 A/36 =US 4235-793

Purified phosphatidyl-choline or lecithin oils - obtd. by extn. of crude phosphatide(s) with alcohol(s), pref. ethanol and treatment with alumina

NATTERMANN A & CIE GMBH 27.04.77-DT-718797

*B04 (D21 D23) (25.11.80) *BE-866-461 A23j-07 C07f-09/02 +C11c-03*

Prodn. of oily, highly purified phosphatidyl cholines from oily raw phosphatides (I) comprises extracting a (I) extract from (I) with solvent selected from lower alcohols and their aq. solns. contg. 85-96% alcohol, directly contacting the extract with Δl_2O_3 adsorbent and recovering the adsorbed phosphatidylcholine.

Pref. the lower alcohol is ethyl alcohol. The adsorbed phosphatidylcholine is recovered by liberation with alcohol. Prod. has a high content of essential fatty acids. 24.4.78 as 899525(4pp393)

COHE/ ★ D13 89963 C/50 ★US 4235-795

Extending the life of shortening for deep frying - using a heat-expanded pumicite particulate as filter aid to remove fatty acids

COHEN M D 20.10.78-US-953173

(25.11.80) A23c-12/02 C09f-05/10 C11b-03

The life of shortening (I) is extended as follows: (a) a filter aid (II) is added to the vat of shortening; (b) the (II) particles are circulated and dispersed in (I); (c) the shortening and the contd. (II) are circulated and passed through a filter. (II) is a heat-expanded pumicite particulate contg. 80% SiO_2, ca 2% Fe_2O_3, ≤ 3% H_2O, ca 3% MgO and trace amts. SO_2, and is expanded as in US3996158 to density 4.8-6lb/ft^3.

(II) are extremely effective as single-pass filter aids in the extrn. of satd. fatty acids from (I). The method reduces the cost of frying with (I) and also prevents the development of burned or rancid taste in food fried in treated oil. 30.10.78 as 953173(4pp488)

HENK D13 40798 B/22 =US 4235-878

Growth-promoting animal feed - contg. antibiotic avoparcin or spiramycin and proteolytic enzyme

HENKEL KG AUF AKTIEN 21.11.77-DT-751902

*C03 (25.11.80) *DT2751-902 A61k-37/48*

A high-efficiency animal feed based on carbohydrates, protein and fats contains 5-700ppm. of the antibiotics aroparcin or spiramycin, and additional acid proteases derived from aspergillus niger and/or Rh to pus rhitopod forms in amt. produce activity of 0.05-2.5 rmTU/g of feed.

Pref. the enzyme has a wide spectrum of action and a pH range of 50% of max. activity at pH 2.5-6.5. The enzymatic activity is 0.2-0.5mTU/g of feed and the antibiotic is present in amt. 5-20ppm.

The feed is esp. used in the intensive raising of animals 17.11.78 as 961709(3pp931)

HENK D13 33691 A/19 =US 4235-879

Animal feed with reduced nutrient content - has feed utilisation improved with proteolytic enzyme and virginiamycin or zinc bacitracin

HENKEL KG AUF AKTIEN 02.11.76-DT-650277 (00.00.76-DT-633105)

*C03 (25.11.80) *DT2650-277 A23k-01/16*

Cockerels are efficiently reared by feeding them a high-efficiency animal feed contg. carbohydrates, protein, fats and other opt. conventional additives. The feed further comprises 5-150ppm of the antibiotics virginiamycin, zinc bacitracin or plavophospholipol; and acid proteolytic enzymes in amt. to produce activity of 0.05-2.5mTU/g of feed. The feed has a deficiency in essential nutrient components e.g. raw protein, and/or essential amino acids, and is convertable energy of 5-20 wt.% w.r.t. standard animal feed mixts.

Higher yields w.r.t. their feed utilisation and/or the wt increase produced by them are achieved, compared with the feed contg. only the antibiotic or the enzyme. 22.1.79 as 005482(+23.7.76-DT-633106)(+8.7.77(2), 2.11.77, 18.10.78-US-814047-8, 847793, 452410) (4pp231)

HENK D13 05435 B/03 =US 4235-88

Animal feeds contg. the antibiotic tylosin - together with proteolyt enzyme, giving improved weight gain and feed conversio efficiency

HENKEL KG AUF AKTIEN 27.06.77-DT-728850

*B03 C02 (C03) (25.11.80) *NL7806-142 +A61k-37/48*

A high efficiency animal feed for piglets and for fattening pigs comprises carbohydrates, protein and fats and opt. conventional additives. The feed further comprises 10-40 ppm. of the antibiotic rylosin, and additional acid proteol-tic enzymes having a wide spectrum of action and range 50% of max. activity at pH 2.5-6.5. The enzyme is derived from Aspergillus niger from the genus Tramates, or from Rhizopes rhitopodiformis, and are present in amt. such thatan enzymatic activity of 0.2-0.5 mTU/g of feed is produced.

The antibiotic and enzyme components are expedently added to the feed as a premix, e.g. combined with extract-ed soybean meal pellets. 30.7.79 as 061628(+22.6.78-US-917984)(2pp931)

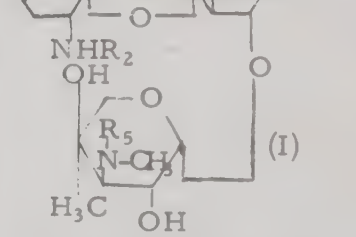
FARB D13 09408 C/06 =US 4235-888

Sisomycin-type pseudo-tri:saccharide cpds. - are amino:glycoside antibiotics esp. effective against urogenital infections caused by e.g. escherichia coli

BAYER AG 22.07.78-DT-832268

*B03 C02 (25.11.80) *DT2832-268 A61k-31/70 +C07h-17/08*

Pseudotrisaccharides of formula (I) and their salts are new R_1-5 are H or a gp. $-CH_2-(CH_2)_{n1}-(CHOR_6)_{n2}-An_3-(CHOR_6)_{n4}-CH_2R_7$ in which A is -CH=CH- or $-CH_{(2-n5)}-(CH_2OR_6)_{n5}$; R_6 is H; $-CPh_3$ opt. substd. by 1-4C alkyl or Cl; 1-4C alkyl, 2-6C alkylcarbonyl; formyl or benzoyl; or $2R_6$ form 1-6C alkylidene; R_7 is H or OR_6; n1 is 0-3; n_2 is 0-5 and n3, n4 and n5 are 0-2, the sum of n1+n2+n3=n4 being 1-5. The total number of OR_6 gps. in 1 of R_1-5 is 2-6; 1 of R_1-5 is other than H.



(I)

Cpds. are antimicrobial agents with a broad spectrum of action and a partic activity against Gram-negative bacteria. 28.6.79 as 052871(11pp963)

IOWA ★ D13 90020 C/50 ★US 4235-933

Prepn. of tri:glyceride oil contg. yeast cells - from whey permeate solids, by fermentation with Candida curvata strains

IOWA STATE UNIV RES INC 02.05.78-US-902242

C03 (D16) (25.11.80) A23c-09/12 A23l-01/28 C12n-01/16 C12r-01/72

Whey permeate solids (I) (obtd. by ultrafiltration of whey; contg. mainly lactose (II) with small amts. of soluble protein) are converted into a yeast cell mess as follows: (a) an aq. fermentation medium contg. 2-25% by wt. of (I) is inoculated with a fat-producing strain of Candida curvata capable of producing visible fat droplets in the yeast cells of size 1.2u; (b) the broth is cultured with aeration until 90% (II) has been consumed and the yeast cells have reached the fattening growth phase with visible droplets of fat of size 1.2u. and which contain 40% by wt. (III)(dry basis).

The yeast cell mass may be processed to give high energy amine feeds or single cell protein sources, etc In addn., the spent fermentation medium has a low COD. 2.5.78 as 902242(5pp478)

MILC- ★ D13 90021 C/50 ★US 4235-934

Prodn. of sterile yoghurt of long storage life - contg. modifying additive compsn. of agar, starch, gelatin and sugar

ZENTRALSCHWEIZ MILC 12.12.78-US-968838 (07.12.77-US-858290)

(25.11.80) A23c-09/12

Shelf stable sterile yoghurt is prepd. by a) mixing pasteurised milk with 0.18-0.4wt.% of an additive contg red algae, starch, gelatin and sugar, red algae being the main component, and with 1-5-4 wt.% of a yoghurt culture; b) incrubating the mixt. at 35-45°C until the pH reaches 3.8-

;c) cooling to 20-30°C; d) adding hydrocolloid stabilis- to swell;f) placing the yoghurt in containers and sealing m; g) heating the containers to sterilise the contents and cooling the containers to 4-6°C for at least 24.

The yoghurt has a long shelf life(up to 6 months) without frigeration. It is free of preservatives and stable.

12.78 as 968838(5pp955)

H- ★ D13 90023 C/50 ★US 4235-936

zen beverage concentrates flowable at freezer temps. - have water activity and high sugar content

RICH PRODUCTS CORP 26.03.79-US-024127 (28.01.77-US-763613)

(25.11.80) A23f-03 A23l-02/02

microbiologically stable beverage concentrate comprises ter, sugar, flavouring and fructose and/or unsatd fat. It ntains 15-55% water, sugar in the ratio 0.8-2.1, and the tal solids content is suff. to reduce the water activity to 8-0.9. The total of dextose and fructose present is 50% the sugar present, and 10% in fructose.

The compsn. is soft and flavourable even at freezer mps., and has a long storage life after thawing. 26.3.79 24127. Cip 4154863, 4146652(28.1.77, 24.1.78-US-1995, 917379)(10pp955)

JLL- D13 15167 C/09 =US 4235-937

nverting proteinaceous liq. into food additives - by adding andness imparting and colloid enhancer components under high ear blending

HULL-SMITH CHEM 14.08.78-US-933173

*(25.11.80) *EP---8-242 A23c-21*

eatment of whey is effected by (i) subjecting whey to blen ing shear forces while maintaining heat within the whey conduct the blending above a predetermined temp. (ii) corporating a blandness imparting component to give the ey a bland odour and taste, the blandness component be- g a metal gluconate soln., and (iii) adding a colloid enhan er component pref. a carboxyalkyl cellulose material ded in an amt. of 2-40g/3.785l of whey.

Pref. the process further comprises adding a floc initia or component to automatically separate the whey into sol d fractions. and a liq. fraction. To the obtd. solid fract- n may be added icecream, yogurt and/or dressings. The eated whey is biologically stable and has improved sweet ness. 14.8.78 as 933173(9pp924)

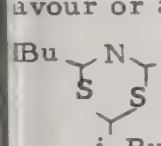
FL ★ D13 90024 C/50 ★US 4235-938

con and caramel flavouring - contains 2,4,6-tri:isobutyl-di:hydro-3,5-di:thiazine

INT FLAVORS & FRAGR INC 13.09.79-US-075079 (17.11.78-US-961684)

E13 (25.11.80) A23l-01/22

rocess for angmenting or enhancing the bacon or ceramel avour or aroma of a foodstuff comprises adding 0.002-100ppm. of a pure crystalline cpd. of for -mula (I)(sic; named as 2, 4, 6-triisobutyl -dihydro-1, 3, 5-dithiazine).



(I)

The process can be applied to a wide range of foodstuffs, includin g meats, avies, soups, convenience foods, beverages, spreads, afoods, bakery products, snacks and pet foods. (I) impar s a crisp bacon flavour and additional pork fat notes to con flavourings and a roasted and burnt character to car- mel flavourings. 13.9.79 as 075079 Div. ex. 4220742 9.2.79-US-010887)(12pp367)

AL ★ D13 90025 C/50 ★US 4235-939

ocoa powder replacement base mixt. - contg. low-swelling starch nd defatted seed material

STALEY A E MFG CO 24.07.78-US-927076

(25.11.80) A21d-10

dry synthetic base contains a)25-300 pts. of granular sta ch having a swelling power of <22 and critical comen alue of ≥ 5.0 at 95°C, and b) 100pts. of defatted vegetable eed material contg. $\geq 35\%$ of protein having a NSI 20-80, e proportions being such that the mixt. absorbs at least s own dry wt. of water at 93°C.

The compsn. has the functional and physical props. of cocoa powder, and can act as a replacement or extender for it in food prods. 24.7.78 as 927076(7pp955)

STAD D13 68170 C/39 =US 4235-942

Digestible, water-insol. poly:aminoacid(s) - with lower degree of polymerisation, useful for nutritional fortification of food

STANDARD OIL CO (IND) 22.02.79-US-014121

*A97 (25.11.80) *EP--15-668 +A23j-03*

New polyaminoacid comprises gps. of ≥ 1 aminoacid select -ed from L-methionine and D, L-methionine and having DP 3-60(4-12). Amino acid is characterised by high insolubil- ity in water an enzyme digestibility.

Disgestible poly-l-methionine is prepd. from L-methion -ine-N-carboxy anhydride in ethanol by (i) preparing the soln. and (ii) combining the soln. with water while maintaining the pH at 5-8 with aq. hydroxide ion to effect polymer -isation.

Prods. are useful for nutritional fortification of food materials. 22.2.79 as 014121(5pp936)

FOSS- D13 14954 C/09 =US 4236-075

Infrared filter for multicomponent liq. mixtures, esp. milk - having set of paired infrared filters with chopper on beam and thermopile to detect signal evaluated by microprocessor

FOSS N ELECTRIC A/S 07.08.78-US-931621

*J04 S03 S05 (W05) (25.11.80) *DT2838-706 +G01j-01*

Apparatus for measuring liquid components, partic. in mi -lk, includes an IR emitter passing a beam through a trans -parent sample holder via a chopper operating at present frequency, and pairs of optical filters each associated with a respective component and each having a filter passing a narrow high absorption band and a filter passing a low absorption reference band.

The filters are successively positioned in the beam between emitter and holder each for at least 0.5s. and a number of chopper cycles. A thermopile detector receives radiation from the holder and there is circuitry calculating component concentrations from the signals from filter pairs. 7.8.78 as 931621(13pp1358)

LESC- ★ D13 90097 C/50 ★WP 8002-501

Cartilage prod. obtd. by extracting with water and concn. - useful as food supplement, in cosmetics and pharmaceuticals

LESCARDEN LTD 04.04.80-US-137547 (11.05.79-US-038051)

B04 (B07 D21) (27.11.80) A61k-07/02 A61k-35/12

D/S: N(JA, RU, SU) + E(CH, DT, FR, GB, LU, NL, OE, SW)

Prodn. of a biologically-active cartilage prod. (A) compri- ses heating raw cartilage from an animal, fish or reptile with water, at ratio 1:100-100:1, at 50-125°C under a pre- determined pressure (esp. 10-30 psi) for 5 min-5 hrs.(esp 1-5 hrs). The resulting aq. extract is then sepd. from suspended solids.

Pref. the extract is then concd. in vacuo to 45-65% solids, and this concentrate opt. dried, e.g. with a dehydra -ting liquid, such as by azeotropic distillation, or by freeze drying.

(A) is useful in foods (as a high-protein, low-fat supp- lement), cosmetics or pharmaceuticals, specifically for mfr. of lipsticks or rectal suppositories for treating pruritus ani or haemorrhoids.

Crude, mechanically-trimmed cartilage with residual tissue still attached can be used and processing can be carried out at high temp. without the need for strict ex- clusion of O_2. No pre-grinding of the starting material is necessary.

2.5.80 as US0503.(34pp1251).

(E) ISR:USRE28093; US3400199; US3476855; US3478146; US3772432; US3966908; CH-476495; FM---3186; 1 Journal Reference.

KONN D13 35879 C/20 =WP 8002-505

Combined vaccine for poultry - active against disorders caused by adeno-like virus and reo virus

GIST-BROCADES NV (APON) 22.05.79-NL-004021

*B04 C03 (27.11.80) *NL7904-021 A61k-39/29*

D/S: N(DK, NO, US) + E(CH, DT, FR, GB, LU, NL, OE,

SW).

Combined inactivated vaccine, active against at least ALV-induced drop in egg prodn. and RV-induced rachitic symptoms, osteoporosis or femur degeneration (where ALV = adeno-like virus and RV = reo virus) is new.

21.5.80 as NL0019.(18pp367).
(E) ISR: NL7802415; LU--79154; NL7408579; 2 Journal References.

BALS/ ★ D13 90114 C/50 ★WP 8002-557
Agglomeration of materials with animal blood - by heating and agitating to form homogeneous curdled mass
BALSSE C 24.07.79-FR-019047 (16.05.79-FR-012397)
C03 (C04) (27.11.80) C05f-01
D/S: N(BR, DK, RU, SU, US)

Agglomeration of liq. and/or solid materials is carried out by mixing the material with liq. animal blood (or plasma or serum) and heating to boiling while slowly agitating until a homogeneous curdled mass free of liq. phase is obtained.

The products can be used as animal feeds, food additives, fertilisers, soil improvers, etc. The process can also be used to facilitate disposal of abattoir effluents by incineration.

16.5.80 as FR0078 (63pp367)
(F) ISR: FR2400328; FR1382451; GB1153135; DS-12831 FR-350637; GB-938583; GB1483150; FR-535371.

See Also

D11 SU 730678	D16 J8 0045182	D16 US 4235043
D22 J5 5137175	D22 US 4235917	D23 CH 620099
D23 DS 2552311	D23 DS 2609705	D23 DS 2651761

D14: FOODSTUFF MACHINERY

DALE/ ★ D14 88395 C/50 ★BE-884-630
Chopping device for cutting stalks of vegetables into small pieces - has two holding panels and wire knife guides
DALEMANS L 04.08.80-BE-884630
(01.12.80) A23n

Two standing panels between which greens such as celery, rhubarb can be placed are arranged so that a small board can be inserted between one wire bar and the first wire, for the sticks to stand on and be aligned.

A knife at least as long as the width of the device can be inserted between the pairs of wires to cut the sticks of vegetable into lengths of 1 cm. Vegetables can be cut up with the help of this device at a very much greater speed than is otherwise possible. 4.8.80 as 884630 (5pp1014)

RAJN/ ★ D14 C/50 ★CS 7903-696
Trimming device for beetroot, sugar beetroot, etc.
RAJNOCH M 29.05.79-CS-003696
P12 (29.08.80) A01d-23/02

VAGU/ ★ D14 C/50 ★CS 7903-877
Cooling unit for water recirculation on tinned food sterilisation
VAGUNDA J 06.06.79-CS-003877
Q78 (29.08.80) F28d-19

BOSC ★ D14 88514 C/50 ★DT 2921-236
Liquid food metering device - with grooved spool valve in bore parallel to displacement plunger (NL 27.11.80)
BOSCH R GMBH 25.05.79-DT-921236
Q39 + Q31 (04.12.80) B65b-29/06 B67c-03/28

A sterile metering and filling device for liquid with solid or semisolid components, for example yoghurt with fruit, consists of a displacement plunger in a bore parallel to another bore leading to the liquid container. A sliding valve in the latter bore has a groove which connects the plunger cavity either to the liquid container or to a discharge opening for the cup to be filled.

This requires only one grooved spool valve with short stroke, resulting in a little wear. The compact design permits a close arrangement of many such devices.
25.5.79. as 921236 (13pp39)

GONR- ★ D14 88729 C/50 ★FR 2450-448
Installation for measuring and mixing ingredients for animal feed - by delivering multitude of small doses of each ingredient to combining unit
GONDARD SA 02.03.79-FR-005480
S02 (31.10.80) A23n-17 G01g-19/22

The installation is of the type in which each ingredient is conveyed from its individual silo to a central combining unit. The combining unit now comprises a distributor into which each ingredient in turn is delivered. The ingregients are received into pockets of a honeycombed reception cell. The pockets are emptied into a weigh hopper ready for discharge for further treatment, partic. milling and mixing.

Ingredients level detectors and wt. sensors are used to actuate fully automatic control, pref. by electronics, of the complete installation. The combining unit now receive many small doses of each ingredient in turn so that the combining unit is eventually filled with a full batch made up of many thin layers of individual ingredients. The weigh hopper pref. discharges into a grinding mill. Followed by a cyclone delivering into a mixer.

Premixing takes place in the combining unit which receives ingredients as a multitude of tiny doses. 2.3.79 as 05480 (9pp448)

WINT- D14 40419 A/23 =GB 1581-31
Washing machine to clean vegetables with circulated water - which passes through full flow screen prior to recycling pump
WINTERHALTER K KG 15.09.77-DT-741871
*P28 + P43 (10.12.80) *BE-863-442 + A23n-12/02*

Vegetable washing machine consists of a vat into which water is introduced tangentially and then given a circular motion, a grid at the bottom of the vat, and a sieve of smaller aperture size than the grid in a discharge channel joined to the bottom. The total aperture size of the sieve is greater than that of the grid.

Aperture width of the grid and sieve is pref. 6 mm. and 0.4 mm. respectively. Pref. the sieve is parallel to the vat axis.

Local clogging of the grid and sieve is avoided. 3.2.78 as 004499. (5pp1376)

TOSI ★ D14 89364 C/50 ★J8 0045-249
Appts. for whipping juice drink contg. protein - comprises flat chamber having vertical ribs and flat rotator
TOSHIBA MACH KK 30.04.76-JA-049744
(07.11.80) A23c-13 B01f-03/04 B01f-13/08

Device for whipping a juice drink contg. protein fed into a flat whip chamber having vertical ribs and flat rotator is claimed. A drink feed port and air feed port are opened near the centre of the rotator to feed the raw drink and air towards the end face of the rotator. 30.4.76 as 049744, B01f-3/04, A23c-13/00, B01f-13/08 (7.11.80) TOSHIBA MACK KK (3pp26) (J52134065)

TINN= ★ D14 89435 C/50 ★SU-729-419
Food products freezer with vacuum-chambers - has ring-shaped body with gap for loading and unloading holders
TINNED GOODS VEGETB 02.06.77-SU-493986
Q75 (30.04.80) F25d-13/06

The food prod freezer contains a thermally-insulated cylindrical body with a jacket for coolant circulation and pipes for heat-exchanging gas supply and removal, moulds with holders for the food product, a drive and a mechanism for holders loading and unloading. In order to intensify food product freezing by continuous freezing process, the body has a ring-shaped body with a gap for loading and unloading the holders and is provided with splitting arrangements. The splitting arrangements are situated at the body inlet and outlet and are connected to each other by guides for transportation of moulds with holders. Each mould has a curved rack for interaction with the drive.

aev, G.S., Kuzimin, M.P., Voskoboiinikov, V.A. et al 1.15/25.4.80.2.6.77.as493986(4pp110).

FO= ★ D14 89453 C/50 ★SU-729-473
uid sampler for use during prodn. of crystals by evapn. in vacuo - s receiver made as two horizontal cylindrical coaxial chambers d perforated screen and valves, used in food mfr.
KRASD FOOD IND RES 10.01.77-SU-441987
J01 S03 (28.04.80) G01n-01/10
evice for sampling liquids, has receiving chamber made two horizontal coaxial cylindrical containers with holes to take in the liquid and let it out again, plus pipes connecting the sampler to the vacuum and the atmosphere.
Operational control in the evapn process is guaranteed by placing the cylinders so that they can rotate and are fitted with a vertical perforated partition inside, between the sample inlet and outlet holes. The sample receiver is located inside the vacuum chamber.
Akindinov, I. N., Bul. 15/25.4.80.10.1.77.as441987(3pp29).

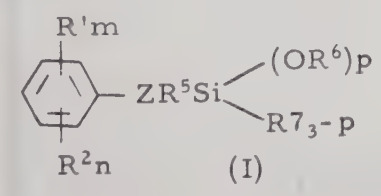
See Also
D13 BE 884565 D15 GB 1581186

D15: WATER TREATMENT

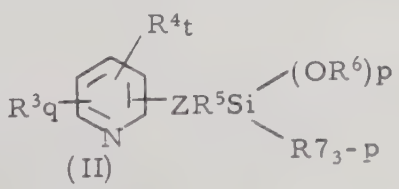
VER- ★ D15 88370 C/50 ★BE-883-574
acteriostatic water filters - contg. activated charcoal and silver dsorbed on cellulose fibres or powder
EVERPURE INC 01.06.79-US-044420
(01.12.80) B01d C02f
acteriostatic compsns. for water filters contain (a) a owdered activated charcoal, and (b) an inert, non-toxic, nely divided, water insol. material impregnated with 1-% silver. The Ag-contg. material (b) is dispersed in he charcoal (a) and is present in sufficient quantity to be n effective bacteriostat during the life of the filter, the g being liberated slowly without inhibiting the absorption roperties of the carbon or increasing the specific wt. of he C.
Treated water has no salty taste, the Ag is liberated t a controlled rate, and the compsns. are cheaper than hose in which the charcoal is coated with Ag. 30.5.80 s 883574 (31pp520)

AIL/ ★ D15 88378 C/50 ★BE-884-522
stallation for treating waste water by aeration and decanting - reates outflow current in discharge pipe by injection of compressed ir
CAILLOT B 29.07.80-BE-884522 (23.09.76-FR-029182)
(17.11.80) C02f
nstallation comprises a closed vessel in which the waste ater is aerated, flocculated, decanted to settle out the ludge and discharged via a large, flat drainage channel hich cloats above the sludge and below the water surface vel. Drainage channel is piped to a discharge connect ion on the exterior of the vessel.
Branch into the pipe from the drainage channel to the ischarge connection is now used to introduce a controlled upply of compressed gas, partic. compressed air. The oint of introduction is such that inflowing gas bubbles rive liq. along the pipe from the drainage channel toward he discharge connection. The point of introduction is ref. below the lowest level to which the floating drainage hannel can sink. A non-return valve, is pref. fitted in he pipe between the drainage channel and the gas inlet ranch. 29.7.80 as 884522 (11pp448)

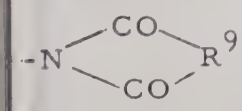
METT ★ D15 88403 C/50 ★BE-884-652
henoxy-alkyl tri:alkoxy-silane - useful as coupling agent for rganic cpd. and mineral filler, flocculant adhesive and polishing gent
M & T CHEMICALS INC 08.08.79-US-064712
A60 E11 G02 (A26) (01.12.80) C07f
ovel silane is of formula (I) or (II) where R^1 is $-NH_2$, $-NR8H$, $-NR8_2$, a gp. (III)- CHO, -CN, -COR8, -COOR8,



(I)

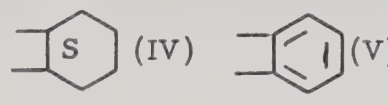


(II)



(III)

Cl, Br, I, $-NR^{10}-SO_2R8$, $-NR^{10}-COR8$, $-NR^{10}-COOR8$, SO_2R8, SOR8, NO_2, and 2-5C alkenyl; R2 is 1-12C alkyl or (thio)alkoxy; R_3 is Cl, Br, I, -COOR8, CN, $-NH_2$, $-NR8H$, $-NR8_2$, $-NR^{10}-COOR8$ or $-NR_{10}-COR8$. R_4 is 1-12C alkyl; R_5 is $-CH_2-$, or 3-12C alkylene; R_6 and R7 are alkyl, cyanoalkyl, alkenyl, cycloalkyl (alk)aryl or aralkyl, all alkyl gps. contg. 1-12C; R9 is $-C(R^{11})(R^{12})-C(R^{13})(R^{14})-$, -CH=CH, or a gp. (IV) or (V) where R^{11} and R_{13} are Cl, Br, I or 1-12C alkyl; R_{10} is as R8; R_{12} and R_{14} are H or 1-12C alkyl; Z is O or S, -SO- or $-SO_2-$; m is 1-5; n is 0-2; p is 2 or 3; q is 1-3 and t is 0 or 1; provided that (a) when m is 2; one or both R, is or are $-NH_2$, $-NR8H$, $-NR8_2$, (III), $-NR_{10}-SO_2R8$ or COOR8 and the remaining R_1 is -CN, Cl, Br, I or NO_2; (b) when m is 3 one of R_1 is $-NH_2$, $-NR8H$, (III) or $NR8_2$ and the 2 remaining R_1 are Cl, B , or I; (c) when m is 4 or 5, R_1 is Cl, Br, or I; (d) n is 1 or 2 when m is 1 and R_1 is $-NH_2$ or NO_2; (e) m+n is $\geqslant 5$ and (f) R_1 is $-NH_2$, $-NR8H$, $-NR8_2$, -HCO, -CN, -COR8, Cl, Br, I, SO_2R8, SOR8 or NO_2 only when n is $\geqslant 1$ and p is 2. 6.8.80 as 884652 (18pp950)



(IV)

(V)

CHRI/ ★ D15 C/50 ★BR 7903-250
Desalination furnace for saline water - and recovery of natural subsoil water
CHRISTIAN G J Y 22.05.79-BR-003250
J01 (25.11.80) B01d-01

DEGM ★ D15 C/50 ★BR 8002-031
Prepn. of a silico-aluminate suspension - from sodium silicate soln.
DEGREMONT SA 03.04.79-FR-008294 1.4.80 as 002031
E33 L02 (25.11.80) C01b-33 C01f-07/02 C02f-01/52

VOTR/ ★ D15 C/50 ★CS 7903-190
Exchangeable magnet frame for water treatment appts.
VOTRUBA V 10.05.79-CS-003190
(29.08.80) C02f-01/48

NOVA/ ★ D15 C/50 ★CS 7903-434
Elimination of residual ozone from water - obtained from mixing installations
NOVAK Z 17.05.79-CS-003434
E36 (29.08.80) C02f-01/78

MIKO/ ★ D15 C/50 ★CS 7906-846
Waste sludges processing
MIKODA J 09.10.79-CS-006846
J01 (29.08.80) B01d-53/14

MICH/ ★ D15 C/50 ★CS 7907-103
Filter for water processing
MICHEK V 19.10.79-CS-007103
(29.08.80) C02f-01/28

SUMI- D15 64947 V/37 =DS 2407-922
Basic aluminium salt aq. soln. continuous prodn. - from (hydrated) oxide in acid suspension
SUMITOMO ALUMINIUM (SUMO) 26.02.73-JA-023524 (26.02.73-JA-023523)
*E33 (D22) (04.12.80) *DT2407-922 C01f-07*
An aq. soln. of basic aluminium salts, useful as coagul-

ant, impregnating agent, antiperspirant, etc., is prepd. A suspension of aluminium hydroxide and/or aluminium trioxide together with minerals is prepd. contg. per mole of aluminium hydroxide present 1-5 moles of hydrochloric or nitric acid or contg. per mole of Al_2O_3+Fe_2O_3 1-5 moles of hydrochloric or nitric acid and having a solids content of 5-60 wt.%.

The suspension is passed through a reaction tube heated indirectly at least to the b. pt. of the particular soln. of basic aluminium salts at a flow velocity of at least 0.1 cm/sec., pref. 0.5-400cm/sec., so that the suspension is not deposited. The suspension is then passed to an after treatment or after reaction zone where the temp. of the reaction mixt. is maintained. 19.2.74 as 407922(6pp)

UNIC D15 89131 V/52 =DS 2427-088

Waters contg. unsatd carbonyl cpds. decontaminated - by treatment with base to form biologically decomposable condensates

UNION CARBIDE CORP 07.06.73-US-367739

*E17 P35 (04.12.80) *DT2427-088 +C02f-01/52 C02f-03*

Waste water contg. 3-10C α,β-unsatd. aldehydes or ketones, e.g. acrolein and resulting from the prepn. of acrolein is treated with a base to pH 8-9 and then heated at 80-95°C for 15-30 minutes. The waste water is then passed into a biological system with an active biomass. The pH and heat treatment condense the unsatd. carbonyl cpd. so that the biomass is not inhibited. 5.6.74 as 427088(4pp068)

NALC D15 23962 W/14 #DS 2453-107

Phospho-ester scale and corrosion inhibitor - low in ortho phosphate and having a high zinc stabilization

NALCO CHEMICAL CO 15.02.73-US-332968 (06.11.74-DT-453107)

*E11 M14 (04.12.80) *US3873-465 C23f-11/14 +C02f-05/14*

Phosphorus ester with a mix. orthophosphate content of 5-6% is prepd. as boiler scale and corrosion inhibitor for alkaline cooling water. An alkanolamine, pref. triethanolamine is mixed and warmed to 75-85°C with a mixt. of a polyhydroxycpd, pref. an ethylene oxide adduct of glycerine, ethylene glycol and a monoether of ethylene glycol in a ratio of amine to mixt. of 60:40 to 40:60. During a period of 4-8 hours 150-300 wt.% (based on amine) of phosphorus pentoxide is added and the reaction temp. raised with constant velocity to 120°C. The temp. of the mixt. is raised to 130-140°C in $\frac{1}{2}$-2 hours, the mixt. heated at 140°C for 1 hour, a monoether of ethylene oxide added and the mixt. heated at 135-140°C for $\frac{1}{2}$-2 hours. The phosphorus ester prod. is then filtered off. The ester prod. has increased activity as an inhibitor and as stabiliser for zinc. 6.11.74 as 453107 (4pp068)

WATE- D15 48078 W/29 =DS 2461-663

Fine sieving drum for solid matter suspended in water - esp. water from sewage digesting tanks for clarification

WATER POLLUTION CON (EWIN/) 26.12.73-US-427600

*J01 +P43 (04.12.80) *DT2461-663 +B07b-01/22 C02f-01*

Revolving screen for aq. suspensions of solid particles dips into a liq. tank from which the screened liq. is extracted, while the aq. suspension is fed inside the revolving drum. A spray is arranged at the top dead centre of the drum to detach the solids into a trough. To prevent solids from dropping back prematurely, an excess pressure is kept up inside the drum, at least in the ascending zone. The parameters are chosen to retain a water film across the screen meshes.

This raises the filtering efficiency considerably by simple means. 27.12.74 as 461663 (17pp39)

INSE D15 28692 X/16 =DS 2544-117

Semi-permeable membranes of crosslinked, opt. substd. polyacrylamide - for sepn. of organic or inorganic cpds. from aqueous solns.

INST NAT RECH CHIMIQUE 02.10.74-FR-033244

*A88 J01 (A14) (04.12.80) *DT2544-117 B01d-13/04*

Semipermeable membranes consisting of cross-linked poly-acrylamide (PAA) and 1-50μ thick are produced by applying an aq. soln. of the PAA of mol. wts. 10,000-15,000 to a carrier, evaporating the water and heat treating the membrane formed. The heat treatment is carried out in an inert atmos. or inert solvent under conditions given by a point M in surface in a coordinate system of °C and time bounded by points A, B, C, D and E. The coordinates for the points are A 0.4 hr. and 220°C, B 1.2 hr. and 220°C, C 60 hr. and 185°C, D 80 hr. and 120°C and E 50 hr. and 120°C.

The polymer is pref. a copolymer of a) acrylamide and (meth)acrylic acid or b) substd. methacrylamide and N-alkylacrylamides. The membranes are esp. suitable for the fractionation of dissolved salts or organic cpds. by reverse osmosis, ultrafiltration or dialysis. 2.10.75 as 544117 (6pp260)

LEHM/ D15 04332 B/03 =DS 2730-883

Chlorine-free aq. chlorine di:oxide soln. prepn. - by adding chlorite to water, acidifying, adding metal hydroxide and then carbonate

LEHMANN W 08.07.77-DT-730883

*E36 (04.12.80) *DT2730-883 C01b-11/02*

An aq. chlorine dioxide soln. is produced which is stable without need of further stabilisers. Into 15-45 pts. wt. water area added 35-105 pts. w., chlorite and 3-9 pts. wt of an inorganic acid added slowly to obtain a pH of 4. Then 0.5-2.5 pts. wt. of a water soluble metal hydroxide are added to adjust the pH to 7.0-7.2 and then 0.5-1.5 pts. wt of a carbonate added with constant stirring. Pref. there is used a 30% sodium chlorite soln. a 10% NaOH soln, a 98% Na_2CO_3 soln. and a 10% H_2SO_4 soln. 8.7.77 as 730883 (2pp068)

MIND/ ★ D15 88437 C/50 ★DS 2923-726

Utilisation of activated sludge - from filter plants for reducing iron oxide(s)

MINDERMANN F 12.06.79-DT-923726

M24 (04.12.80) C21b-13

The sludge formed in biological oxidn., or activated sludge is dried and used as a reducing agent in the redn. of Fe oxides. Pref. the sludge is used in the carbonised condition and is mixed with Fe oxide and formed into pellets. The pellets can also be used for the redn. of Fe oxide sludge in the Bechamp reduction process.

Sludge formed in clarification plants and filter plants is utilized as reducing agent which saves costly high quality reducing agents, and the method reduces environmental pollution. 12.6.79 as 923726 (3pp095)

SICK/ ★ D15 88478 C/50 ★DT 2920-737

Regenerating effluents from bottle washing machines - by combination of oxidn., flocculation and other treatments

SICK P 22.05.79-DT-920737

Q39 (04.12.80) B67c-01 C02f-01/72

Process and appts. for regenerating spent wash liquor (I) and spray water (II) from a bottle washing machine are claimed. (I) is purified by (a) adding an oxidising agent and filtering off oxidised impurities, (b) converting alkali metal aluminates into insoluble Al cpds. and removing these by filtration and (c) adding a polyelectrolyte flocculant and filtering off flocculated material. The purified liquor is then recycled to the washing machine, opt. after adding fresh wash liquor.

(II) is purified by (a) adding an oxidising agent and separating solids by sedimentation, (b) adding a sterilising agent to remove biological pollutants, (c) neutralising the alkaline water, (d) adding a flocculant and filtering off flocculated material, and (e) adding more sterilising agent. The sterilised water is then recycled to the spray zone of the washing machine, opt. after adding fresh water.

The treatment removes undesirable impurities (cellulose, carbohydrates, metal and aluminate ions, drink residues, etc.), reduces material costs and avoids pollution problems. 22.5.79. as 920737 (23pp367)

ARH ★ D15 88489 C/50 ★DT 2920-914
aste-water sludge dewatering - using acidic gypsum waste from hosphoric acid prodn. as filter aid
HOECHST AG 23.05.79-DT-920914
A97 C04 E36 (04.12.80) C02f-11/14

hen using Ca sulphate for dewatering waste-water ludge, there is used an acidic waste gypsum as obtd. om digestion of phosphate ores in the prodn. of phosoric acid.

The process utilises the otherwise useless waste gypum. The residue produced is suitable for dumping or, ith the addn. of further fertiliser salts, recycling as a rtiliser > 90% of the water present in the waste water ludge can be removed. The water recovered is pure nough to be returned to circulation; release of gaseous mmonia does not take place. 23.5.79. as 920914 (9pp280)

STEL- ★ D15 88565 C/50 ★DT 2922-264
Aerator for liquids - with bubble shield of specified shape at end of as supply tube
FA STELZER E 31.05.79-DT-922264
J02 (04.12.80) B01f-03/04

n aerator for liquids consists of a rotor on a vertical haft, driven by a motor above the liquid level. A gas upply tube surrounded the shaft and ends above the otor hub, leaving an annular gap. The tube end is fitted ith a radial bubble shield with a lozenge cross-section. he preferred angle of the bottomcontours with the verical is 90-135° (105°).

This results in an average horizontal flow of the aerated liquid with an improved gas intake and dispersion and n improved power efficiency. 31.5.79. as 922264 (11pp)

ROV ★ D15 88568 C/50 ★DT 2922-348
ea water desalination - by atomisation of solar preheated sea vater in ascending natural draught and condensn.
BROWN BOVERI CIE AG 01.06.79-DT-922348
X25 (04.12.80) C02f-01/14

esalination plant consists of a shaft in which an ascending carrier air stream picks up evaporated sea water rom atomisers in an evapn. space. In a condensn. space bove it, a heat exchanger receives cold sea water and auses the water vapour to condense. The cold sea water hen passes through a solar heat collector before it is tomised in the ascending air stream, produced by natual draught.

The reduced consumption of electrical and/or prim. nergy makes this process more profitable. The plant s simple and can be mfd. at low cost, yet it meets all unctional requirements. 1.6.79. as 922348 (16pp39)

EGM ★ D15 88715 C/50 ★FR 2450-236
emoving ammonia from water, esp. for drinking - by passing hrough bacterial bed after adding oxygen-contg. gas
DEGREMONT SA 01.03.79-FR-005324
E35 (31.10.80) C02f-03/04

he water contg. < 20 mg/l of ammonia is passed up at east one bed of granular material seeded with bacterial nicroorganisms. Oxygen is added to the water current efore it is injected into the bed, which results in the release of oxygen bubbles throughout the filtration bed. The rocess is carried out using a bacterial bed of material uch as sand or carbon with injection means for passing xygen or an oxygen contg. gas into the current.

The process is particularly applied to drinking water. t enables addn. of oxygen according to the ammonia conent and the movement of the bubbles avoids blocking of he column, releasing excess biological mass which can e eliminated. 1.3.79 as 005324 (10pp597)

AGE/ ★ D15 88716 C/50 ★FR 2450-237
ackaged multistage treatment plant for domestic sewage, etc. - ingle plastic moulding of septic tank, sedimentation channel, ecreasing tank and inspection chamber
SAGE J 02.03.79-FR-005694
(31.10.80) C02f-03/30

he plant comprises a septic tank with transfer of effluent to an internal, slow-flow, horizontal sedimentation channel; an internal degreasing tank and inspection chamber piped in series between the sedimentation channel and the out-flow connection. Pref. the outer wall of the degreasing tank joins the vertical side of the septic tank to the underside of the base of the sedimentation channel.

The degreasing tank is pref. located underneath the sedimentation channel. The exterior form of the degreasing tank, e.g. downwardly convergent conical, eliminates any possible problem of infilling beneath the tank as the plant is installed.

The plant is inexpensive, compact, lightweight and easy to install with less risk of leaks. 2.3.79 as 005694 (6pp448)

DAIL D15 00305 B/01 =GB 1581-122
Liquid treatment using folded membrane - having outer cylinder with folded membrane element around central collector
DAICEL KK 20.12.77-JA-U72560 (13.06.77-JA-U77449)
*J01 (10.12.80) *DT2825-698 B01d-13*

Liquid treating unit consists of a semi-permeable membrane module sealed in a pressure resistant cylinder. The module consists of a liquid collector channel, a semi-permeable membrane folded to increase the number of feed and product passages on opposite sides, an adhesive tape to adhere each pair of product passage folds to close the product passage only, and spacers in the feed passages. The membrane is a strip of synthetic resin or cellulose deriv. and may have a backing fabric.

Units can be cleaned easily and so results in improved sepn. 26.5.78 as 023000 (+11.7.77; 28.9.77-US-082686; 130859) (16pp1376)

BALG D15 75876 Y/43 =GB 1581-138
Gravity settler with many narrow channels - formed by a stack of sloping parallel plates
BALLAST-NEDAM GRP NV (SKIM-) 23.04.76-NL-004390
*Q42 (10.12.80) *BE-853-747 B01d-21/24*

Water is gravity sepd. from insoluble substances using a device consisting of a reservoir defining a flow path of elongate channels stacked in parallel array. Supply and discharge chambers communicate with the channels. Uniform distribution of the mixt. is assisted by throttles constituted by teeth in the channels. The width of the teeth increase in the upwards or downwards depending on the direction of gravity sepn. The reservoir has separate sepd. substances and water discharges. 22.4.77 as 016885. (6pp)

RHON D15 74153 Y/42 =GB 1581-178
Water soluble, high mol. wt. acrylic (co)polymers - prepd. by photopolymerisation, used in treatment of water
RHONE-POULENC INDUSTRIES 14.04.76-FR-011634
*A14 (A97) (10.12.80) *BE-853-559 C08f-02/48*

Novel prodn. of a water-soluble (meth)acrylic homo- or co-polymer of high molecular wt. comprises depositing a thin layer of an aq. soln. of ≥1 (meth)acrylic monomer contg. a photopolymerisation initiator and ≯1 mg. O_2/l. soln. on a support. The layer is then photopolymerised by radiation of 300-450 mμ for 1-20 min., at a dosage of 20-300 W/m², in an atmosphere contg. ≯5 vol.% of O_2; the support being cooled to remove heat caused by the polymerisation. The cooled thin layer is then irradiated with > 300 and < 2000 W/m², with 300-450 mμ radiation for 1-20 mins. in an atmosphere contg. ≯0.5 vol.% O_2. The non-liq. layer obtd. is removed from the support and irradiated with 20-500 W/m² using 300-450μ wavelength radiation for ½-3 hrs.

The polymers are useful partic. for water treatment. 12.4.77 as 015163. (8pp965)

BLAC D15 74403 Y/42 =GB 1581-18(
Conical press for liquid extraction - has two rotors with hydrostati thrust bearings at rotor perimeters to minimise friction
BLACK CLAWSON CO 05.04.76-US-673445
*J09 P71 +Q62 (D14) (10.12.80) *DT2714-057 B30b-09/2(+F16c-32/06*

Cone press consists of a pair of rotor assemblies at an

angle to each other to define a pressing zone mounted in rigid side structures which are pivotally mounted on a frame. Each assembly includes a frusto-conical screen forming the pressing face and a plate forming the axial outer surface. Thrust and hydrostatic bearings are located between each plate and its side structure. The supply of fluid to the hydrostatic bearing is controlled in relation to the load on the rotor drive.

Pref. the pad of the thrust bearing can be cleaned by flushing with a liq. Uniform dewatering is possible. 30.3.77 as 013507. (8pp1376)

FARB D15 08524 A/05 =GB 1581-264

Organically charged industrial waste salts treated by oxidn. - with hot gas avoiding excessive temps. and smoke prodn. (BE 20.1.78)

BAYER AG 22.07.76-DT-632954

*J09 Q73 (10.12.80) *DT2632-954 C22b-04*

Purificn. of salts or salt sludges polluted with 1-70wt.% organic substances, based on total salts, comprises continuously supplying and forming a melt of the salts or salt sludges at 600-1000°C by direct electrode resistance heating; contacting the melt with gas contg. O_2 while advancing the salts through successive stages; continuously withdrawing purified salts; and continuously withdrawing waste gases.

The salt (sludge) may contain sulphates, chlorides, phosphates, nitrates and borates of alkali(ne earth) metals, individually or in combination. Melting may be in the presence of a flux.

Method avoids the use of high temps. used in known processes, provides complete oxidn. of the organic constituents, and generates a min. amt. of smoke. 20.7.77 as 030447. (5pp945)

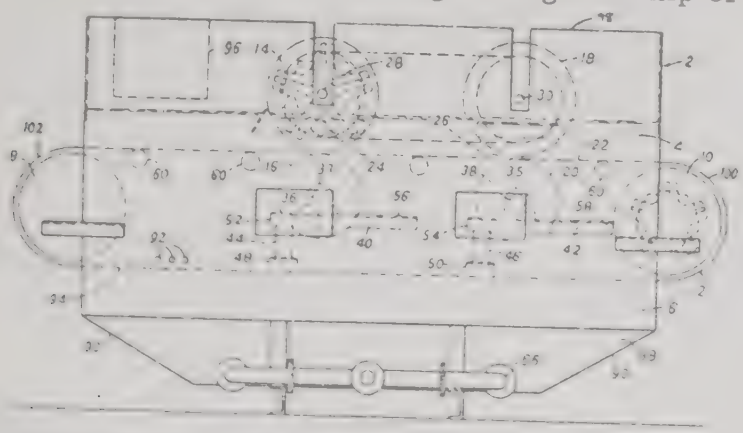
AMCR ★ D15 88746 C/50 ★GB 1581-328

Dewatering press for sewage - has conveyor with upper run between press rollers driven by hydraulic motors

AMES CROSTA BABCOCK 23.12.75-GB-052644

P71 (10.12.80) B30b-09/24

The dewatering press (2) has an endless pervious conveyor belt (12) with an upper run passing through the nip of a



pair of pressure rollers (8). The belt and upper roller are independently driven. The rollers rotate at the same peripheral speed as the linear speed of the belt, and in the same direction at the point of contact.

The belt and roller are driven by variable speed hydraulic motors (62, 86). The hydraulic fluid supply lines to the motor include spring loaded pressure relief valves. 23.3.77. (6pp980)

GENO ★ D15 88811 C/50 ★J5 5109-496

Treatment of waste water contg. starch etc. - by aerobic fermentation in medium contg. Monascus microorganism and nitrogen source to reduce BOD

GENERAL FOODS CORP 13.02.79-CA-321389

(D17) (22.08.80) C02f-03/34

Treatment of waste water containing starch and nutritious components is claimed in which the waste water components is fermented under aerobic conditions at 20-40°C and a PH of 4-7 in the presence of microorganism of Monuscus species in a culture medium contg. nitrogen source, and the waste soln. is hydrolysed and the hydrolysed material is partially assimilated. The microorganism comprises Monuscus anka, Monuscus major, Monuscus rubropunctatus, Monuscus ruber and Monuscus purpureus.

The process is used for reducing a high "BOD" of waste water produced in food industry to control environmental pollution. 12.2.80 as 015905 (7pp15)

KAOS ★ D15 89299 C/50 ★J5 513

Sludge-contg. mixed fuel - obtd. by mixing fuel oil, slu pulverised coal, water and a polyoxyethylene aliphatic amine

KAO SOAP KK 16.04.79-JA-046521

A95 E16 H06 (H09) (31.10.80) C10l-01/32

A sludge-contg. mixed fuel is obtd. by mixing a fuel o sludge, pulverized coal, water, and a compound selec from polyoxyethylene aliphatic amines, or their salts, the formula (I), where R_1 is 6-22C alkyl or alkenyl; m

(I) $R_1 - N(-(CH_2CH_2O)_mH)(-(CH_2CH_2O)_nH)$

n are, respectively, 0 t 20, and m + n is 1 to 30

Pref. proportion of sludge, coal, fuel oil, a water is 1 to 12 wt.% : to 50 wt.% : 25 to 70 wt.% : 5 to 50 wt.%.

The sludge-contg. mixed fuel, featuring the utilizati of sludge generated from urban sewage treatment plant, etc., is a highly stable mixed fuel which is free of sepa tion and sedimentation during storage, transportion, et and also aids treatment of troublesome sludge. 16.4.79 046521 (4pp117)

KAOS ★ D15 89300 C/50 ★J5 5139-

Sludge-contg. mixed fuel compsn. - obtd. by mixing fuel oil sluc from sewage treatment, coal powder water and polyoxyethyle aliphatic di:amine for improved stability

KAO SOAP KK 16.04.79-JA-046522

A95 E16 H06 (H09) (31.10.80) C10l-01/32

Fuel compsn. is obtd. by mixing a fuel oil, sludge, pul verised coal powder, water, and a cpd. selected from p -oxyethylene aliphatic diamines, or their salts, of formu (I) (where R_1 is a 6-22 C alkyl or alkenyl, R_2 is a 2-3 C

(I) $R_1-N-R_2-N(-(CH_2CH_2O)_mH)(-(CH_2CH_2O)_nH)(-(CH_2CH_2O)_lH)$

alkylene, l, m, and n a respectively, 0-20, and l + m + n is 1-30).

The fuel compsn, fea uring the utilisation of sludge generated from urban sewage treatment plant, etc., is a highly stable compsn. which is free of separation and sedimentation during storage, transportio etc. The pref. proportion of sludge, pulverised coal, fue oil, and water is 1-12 wt.% : 10-50 wt.% : 5-50 wt%. 16.4.79 as 046522 (4pp117)

TOKU D15 36494 W/22 =J8 0044-6

Waste water treatment - heavy metals removed using chelate resin

TOKUYAMA SODA KK 28.12.72-JA-130229

*A97 J01 (13.11.80) *J49089-691 +B01d-15/08 B01j-20/2 C02f-01/62*

Heavy metals are effectively removed from waste water by contacting heavy metal-contg. waste water successivel with a polymer material contg. amino and/or hydrazino gp. and a polymer material contg. functional gps. -NHCSNHR and/or -NHNHCSNHR (R = H, NH_2, acyl, allyl, carbamoyl or thiocarbamoyl gp.).

In an example, chelate resin contg. -$NHNH_2$, made from poly(vinyl chloride) and hydrazine, was packed in a tower (1st) and thiocarbamide-system chelate resin, made from vinyl chloride-vinylidene chloride copolymer and Et isocyanate, in another tower (2nd.). Then, waste water (pH 4-5) contg. 20 ppm. Hg was passed successively through the 1st and 2nd packed towers to reduce the Hg concn.to 5 ppb. 28.12.72 as 130229, B01d-15/08, C02f-1/62, B01j-20/26 (13.11.80) TOKUYAMA SODA KK (9pp)(J49089691)

KURK ★ D15 89332 C/50 ★J8 0044-65

Filter press for treating waste water - comprises filter plates and compression plates alternately arranged

KURITA KIKAI SEISAK 04.02.77-JA-011835

(13.11.80) B01d-25/12

Press comprises filter plates and compression plates alte -nately arranged to filter the water and press filter bags

interposed between them to compress filter cakes. A projective marginal area is formed at each compression plate to avoid outward deformation of the filter bag. 4.2.77 as 011835, B01d-25/12 (13.11.80) KURITA KIKAI SEISAKUSHO KK (5pp26) (J53097673)

HITK ★ D15 89334 C/50 ★J8 0044-677

Treatment of mineral dust-contg. waste water with waste acid - includes adding neutralising agent and waste acid the the water, stirring, adding coagulation aid and standing

HITACHI METAL KK 04.11.70-JA-096492

J01 M14 (13.11.80) C02f-01/52

Method comprises adding neutralising agent (I) and waste acid soln. (II) contg. free mineral acid and Fe salts to waste water (III) contg. suspended mineral substance, stirring the soln. adding coagulation aid, further stirring the soln.with aeration, and standing the soln. to settle the floc formed.

The method enables the treatment of mineral dust-contg. water and acid-contg. water at the same time, eliminating the need for chemicals and apparatus required for treating the two types of waste separately. Partic. suitable for treating waste water of a dust collector in a foundry and acid waste water from a galvanisation plant.

In an example, in a 42 mmø glass cylinder is placed water contg. 8000 ppm suspended mineral solids to a 200 mm depth. To the water are added 5cc of 10% HCl soln. neutrralising agent and coagulation aid, and the mixt. is stirred 5 min. On standing overnight, floc settles and the supernatant water contains only 8 ppm suspended solids. 4.11.70 as 096492, C02f-1/52 (13.11.80) HITACHI METAL KK (5pp83)

NEWC- ★ D15 89347 C/50 ★J8 0044-907

Measuring chlorine concn. of e.g. sterilised water - by use of two electrodes inserted into sample soln. contg. chloride ion and buffer and sodium chloride or potassium chloride

SHIN COSMOS DENKI 22.05.74-JA-061986

E36 J04 (14.11.80) G01n-27/52

Process for measuring concn. of residual Cl is claimed in which, one couple of electrodes consisting of different kinds of metals (e.g. Ag and Pt or Cu and Au) are dipped in a sampling soln. contg. Cl ion accommodated in a container. A meter is inserted between the two electrodes. A buffer soln. is added to the sampling soln. to maintain constant pH and the electrodes are connected with an electric source and furthermore, NaCl or KCl generating Cl- is added to the sampling soln. and thus, the concn. of the residual Cl in the soln. is measured.

Process is used for measuring a Cl content of sterilised or bleaching water. 22.5.74 as 061986, G01n-27/52 (14.11.80) SHIN COSMOS DENKI KK (3pp15)(J50150491)

CHCC ★ D15 89361 C/50 ★J8 0045-242

Material for increasing oil drop size in water - comprises fibres contg. polyethylene polypropylene composite fibres thermally fused to give specified porosity

CHISSO CORP 07.10.75-JA-120915

A88 J01 (17.11.80) B01d-17/02

Material for increasing oil drop size comprises fibres contg. ≥ 50 wt % polyethylene-polypropylene composite fibres, thermally fused to each other to give porosity of 60-90% and formed into suitable shape with grooves 1-5 mm in depth and 1-5 mm in space on top and bottom surface. Used for treating oil-contaminated waste water. 7.10.75 as 120915 B01d-17/02 (17.11.80) CHISSO CORP. (9pp83) (J52045768)

TOMI- ★ D15 89362 C/50 ★J8 0045-243

Oil-water separator - comprising inverted conical oil collector connected to oil collector container

TOMINAGA SEISAKUSHO 16.06.76-JA-071434

J01 (17.11.80) B01d-17/02

Device is for sepg. oil from water drained from oil factories and oil service stations. It comprises an inverted conical oil collector, covering the surface area of water contained in a tank, and oil collector container above the tank connected to the collector. 16.6.76 as 071434, B01d-17/02 (17.11.80) TOMINAGA SEISAKUSHO KK(5pp26)(J52154177)

TAKJ ★ D15 89368 C/50 ★J8 0045-271

Electrolytic oxidn. of waste water to reduce COD - using insol. anode, electroconductive cathode and granular nickel oxide to catalyse oxidative decomposition

TAISEI CONSTRUCTION KK 30.04.75-JA-051454

(17.11.80) B01j-23/74 C02f-01/46

Waste water contg. soluble oxidisable pollutants, e.g. adhesives etc. is subjected to electrolytic oxidn. treatment to lower COD content by adding NaCl, and carrying-out the electrolysis while recirculating between electrolysing appts. provided with insol. electrode as anode and electroconductive electrode as cathode, and oxidn. decomposing appts. filled with granular Ni oxide catalyst. 30.4.75 as 051454, C02f-1/46, B01j-23/74 (17.11.80) TAISEI CONSTRUCTION KK (3pp34) (J51128155)

ASAH D15 07586 A/04 =J8 0045-274

Decomposition of ammoniacal cpds. in aq. soln. - by addn. of hypochlorite oxidant and aluminium silicate cpd. to produce nitrogen

ASAHI CHEMICAL IND KK 04.06.76-JA-064590

*E35 (17.11.80) *J52148-959 +B01j-21/16 C02f-01/76*

Ammoniacal N contained in a soln. is easily and economically removed by treating with a hypochlorite-type oxidising agent, e.g. NaClO, KClO, HClO etc. in the presence of an Al silicate-type cpd. e.g. natural and synthetic zeolite, kaolin, bentonite, mica etc. so that the NH_3-N is easily converted into N_2 ($3ClO^- + 2NH_3 = N_2+3H_2O+Cl^-$), without any variation in its pH value when NaClO or KClO is used.

The present process is carried out under excellent state even at an ordinary temp. and the amt. of the oxidising agent is pref. 1.5 times the theoretical amt. when the NH_3-N concn. is very low. The Al silicate-type cpd. does not lose its activity even if it is used for a few months. 4.6.76 as 064590, C02f-1/76, B01j-21/16 (17.11.80) ASAHI CHEM. IND. KK (4pp) (J52148959)

OKIG- ★ D15 89369 C/50 ★J8 0045-276

Sterilisation of water and sewage - using sodium hypochlorite soln. produced continuously by electrolysis of sea water

OKI GUM KOGYO KK 30.07.76-JA-091062

(17.11.80) C02f-01/76

In sterilisation of water and sewage, sea-water is electro-lysed to form NaOCl soln.of a constant concn. which is stored, and the stored NaOCl soln. is introduced into the water to be treated. The improvement comprises supplying sea water to the storing vessel under almost constant flow rate, and carrying-out the electrolysis while recirculating sea water between the storing vessel and electrolysing vessel connected to it.

It becomes possible to use an electrolysing vessel of small capacity, and deposition or sedimentation of $Mg(OH)_2$ is prevented. 30.7.76 as 091062, C02f-1/76 (17.11.80) OKI GUM KOGYO KK (3pp34) (J53016455)

EBAI ★ D15 89370 C/50 ★J8 0045-277

Oxidation of waste liq. by contacting with oxygen rich gas - where nitrogen rich gas is introduced to strip of gas by/products and the treated liquor is recycled to the oxidn step

EBARA INFILCO KK 25.03.74-JA-033208

(17.11.80) C02f-01/74 C02f-03/02

In oxidn. of oxidisable matters-contg. liqs. e.g. organic waste liquor etc. by contacting it with oxygen-rich gas, the improvement comprises introducing N_2-rich gas into a portion of the oxidation-treated liquor. This strips-off by-produced gas, i.e. CO_2 etc. and recycling the liquor thus treated to the oxidn. step. preventing lowering of the pH of the liq. therefore biological oxidn. efficiency is improved. 25.3.74 as 033208, C02f-3/02,3/26, 1/74 (17.11.80) EBARA INFILCO KK (5pp34) (J50134974)

DOHP- D15 64297 U/43 =J8 0045-635
Dissolved aluminium - contg solns -hydrolysed in presence of crystalline aluminium oxide
DAI-DOH PLANT ENG (DOH -) 07.04.72-JA-035346
*E33 (19.11.80) *DT2317-585 +C02f-09 C23f-01*

Treatment of an acid or alkaline soln. contg. dissolved Al esp.ind.effluents e.g. from etching processes, is effected by hydrolysis of Al present in hydrolysis reaction in the presence of a crystalline Al oxide, esp. an ortho-Al-hydroxide, e.g. $Al_2O_3.3H_2O$ Gibbsite or Bayerite, having 0.5-500 (1-100)μ av. particle size and present in 1-5(2-3) kg/kg Al concn. Pollution through colloidal aq. Al oxide, capable of pelletising and particle size agglomeration e.g. to 5-10 mm. 7.4.72 as 035346, C23f-1/00, C02f-9/00
(19.11.80) DAI DOH PLANT ENG. (4pp) (J48102042)

CHFA- ★ D15 C/50 ★RU --67-056
Combustor for treating residual water contg. organic matter - has increased contact area based on corrugated baffles around a cylindrical contact element
COMB CHIM FAGARAS 17.11.75-RU-083939
(15.04.79) C02c-05/02

AUOR= ★ D15 89434 C/50 ★SU -729-416
Aq. waste flame decontamination - by pretreatment to produce vapour-gas which is then burnt in organic fuel combustion prods. swirling stream
AS UKR ORG CHEM 01.11.77-SU-541670
Q73 (05.05.80) F23g-07/04

The method is used for flame decontamination of aq industrial wastes contg. various impurities and can be employed in chemical, petrochemical, cellulose-paper and other industries. The method is carried out as follows. The drainage water if lame pretreated and the vapour-gas mixt obtd is completely burnt in organic fuel combustion products separate stream. In order to reduce nitrogen oxid es prodn., the drainage water flame pretreatment and obtd. vapour-gas complete combustion is carried out in organic fuel combustion products swirled streams. The drainage water is pretreated in a reducing atmos at air flow rate coefficiency of 0.85-0.9 and temp of 600-800°C The complete combustion is carried out at air flow rate coefft. of 1.05-1.1 and 950-1050°C.

The method is carried out using a cyclone furnace. The increase of complete combustion zone temp above 1050°C is not recommended, as it will increase the nitrogen oxide prodn. and fuel flow-rate.
Polyantsev, V.E., Bernadiner, M.N., Shurigin, A.P., et al Bul.15/25.4.80.1.11.77.as541670(3pp110).

CIBA D15 62419 V/35 =SU -730-293
Water treatment agents - to prevent furring and corrosion in boilers etc., using hydrolysed maleic acid copolymers
CIBA GEIGY AG 14.02.73-GB-007181
*A97 (A14) (28.04.80) *NL7401-903 C02b-05/06*

Water treatment agents to prevent deposn of Ca and Mg salts and to minimise corrosion and furring of boilers steam pipes, evaporators, etc comprise a hydrolysed copolymer of maleic anhydride with a monoethylenically unsatd monomer(I) in which the mol ratio maleic anhydride I=2.5:1 to 100:1 esp 2.5:1 to 7:1 and the mol wt of the copolymer is $\geq$ 1000. The copolymers are made by soln. polymsn in a reactive org. solvent which also acts as polymsn stopped such as toluene, CCl_4, acetone etc. Suitable comonomers are e.g. (meth)acrylic acid(esters), vinyl acetate, acrylonitrile etc. The copolymers can be hydrolysed with water, alkaline reagents or mineral acids. The prods are added at 0.1-100 ppm to the water.
Jones, T.I., Graham, G., Vainen, M. A., Bul.15/25.4.80. 13.2.74.as995594(2pp).

SNAM D15 39853 Y/23 =SU -730-294
Biological treatment of oil pollution in sea water etc. - using floatable lipophilic agent contg. phosphorus and slow release nitrogen to promote growth of hydrocarbon-assimilating microorganisms
SNAMPROGETTI SPA 03.12.75-IT-029959
*H03 (28.04.80) *BE-849-067 C02b-09/02*

Petroleum and hydrocarbons are removed from sweet water or seawater using salt based compsns (I) which are poorly soluble in water and which have been rendered lipophilic and floatable by paraffination. (I) contain N and P, the N being in slowly released from, and are assimilable by marine microorganisms capable of metabolic transformation of the hydrocarbons.

The agents promote the growth of naturally occurring or planted microorganisms capable of oxidising hydrocarbons, esp crude oil and are esp useful for the biodestruction of oil pollution in seawater and on coasts.
Marconi, W., Oliveri, R., Robertello, A., et al Bul.15/25.4.80.3.12.76.as424503(4pp).

URAL= ★ D15 89609 C/50 ★SU -730-633
Thermal deaerator for electric power station etc. boiler feed water - has jet, water-overflow and double bubble plates, to bring water and steam together to heat and deaerate
URALS HEAT TECHN 17.07.78-SU-649012
J01 Q72 (05.05.80) C02d-01/10 F22d-01/28

Thermal deaerator, used in thermal electricity generating stations and industrial heating boilers, having above one another jet, water-overflow and bubble plates;into the latter a by-pass device is built in the form of a steam by-pass pipe built into the base plate.

The loading limits are increased and working range is extended, by fitting an additional bubble plate above the water-overflow plate, and the space between these two is connected to the exit of the steam by-pass pipe.
Kurnyk, L.N., Kondratev, A.D., Bul.16/30.4.80.17.7.78. as649012(3pp29).

SHAR/ ★ D15 89787 C/50 ★SU -731-202
Heat supply unit for water heating boiler - has pipe bundle built into water heating boiler
SHARAPOV V I 09.11.78-SU-683722
Q74 (30.04.80) C02b-01/10 F24d-03/02

The heat-supply unit can be used in heating boilers to improve make-up water deaeration quality. The unit contains a water heating boiler, circuit water direct and return lines feed water vacuum deaerator with heating agent supply pipeline. The heating agent supply pipeline is connected to the circuit water direct line. In order to increase deaeration quality at reduced heating agent temp., the unit is provided with a pipe bundle built into the water heating boiler. The pipe bundle is connected at the inlet toheating agent supply pipeline and at the outlet to the circuit water return line through an additional pipeline with regulating element.

The circuit water is thus heated by the built-in pipe bundle and is used as the heating agent in the vacuum deaerator. Thus qualitative make-up water deaeration is ensured.
Sharapov, V.I., Polovov, V.A., Lyutikov, A.V., Bul.16/ 30.4.80.9.11.78.as683722(2pp110).

USSH ★ D15 89906 C/50 ★US 4235-677
High purity water distn. appts. for biomedical use - has double trap in drain line and PTFE filters in air vents
US SEC OF HEALTH 23.02.78-US-880425 (29.03.76-US-671713)
(25.11.80) C02b-01/04

Appts. includes a distn. vessel with an associated condenser which delivers the condensate to a carboy. An overflow is connected to the vessel to establish the liq. level. A pair of traps are positioned serially in the overflow conduit. and includes two stages of submerged pipes. The appts. is vented via. filters. One is located between the two traps and the other at the top of the condenser.

Pref. the filters include a porous PTFE membrane, Pref. the carboy stopcock and appts. tubing are also composed of PTFE. The appts. produces high purity, bacteria -free, endotoxin-free water for biomedical use. The traps in the overflow assembly permit pptes to be washed from the flask,yet prevent the admission of atmospheric air.
23.2.78 as 880425 C.i.p. 4089749(14pp295)

CKE/ ★ D15 89907 C/50 ★US 4235-678
olar still with separate condensation sphere - with heat of ndensation used to preheat stored brine
MCKEEN J E 17.03.78-US-887750
Q74 (25.11.80) C02b-01/06 F24b-03/02

water desalination system includes a vacuum-tight tank ith a semicylindrical top. The top is made of a material ore transparent to the violet and ultraviolet part of the pectrum than the red and infrared parts. A condensation phere is disposed above the tank and is connected to it by tube.

A barometric leg is coupled to the sphere and any condnsed water flows into this. Fresh water is stored in a container positioned lower than the sphere. The lower end of he barometric leg is submerged in this water. A vaccum s formed within the tank. Sea water is stored so that it bsorbs solar energy prior to entering the tank. Heat of ondensation is absorbed and is used to supply additional eat to the stored sea water.

The system is used to convert sea water or brackish vater into fresh water. 17.3.78 as 887750(7pp295)

USNA ★ D15 89908 C/50 ★US 4235-679
olar still with circulating working fluid - absorbing heat of ondensation and transferring it to incoming brine
US SEC OF NAVY 15.01.79-US-003181
(25.11.80) B01d-03

. solar still comprises a flat double plate heat exchanger ase with a passage between the plates. A cover also has assages between twin walls. The cover and base together orm a chamber. A heat exchanger working fluid is pumpd in a closed circuit through the passages in the base and over.

Saline water is introduced through an inlet at one end f the apparatus and flows across the base where it is evaorated and condensed on the cover walls. The condensed vater is collected in a trough and removed from an outlet. The pump is activated when solar energy has heated the ase to a predetermined temperature.

The apparatus desalinates brackish water or sea water The still is rendered more efficient by the use of the work iing fluid which recaptures the heat of condensation to enance the vaporisation of additional water. 15.1.79 as 03181(6pp295)

IGG/ ★ D15 89909 C/50 ★US 4235-680
urifying water with dissolved solid contaminants - using solar eating for preheating and final heating before vacuum vaporation
DIGGS R E 12.01.78-US-869015 (28.10.75-US-625850)
Q74 (25.11.80) B01d-03/10 C02b-01/04 F24j-03/02

The water is flowed across a grid from a heater for solar eating and into a trough, from which it is recirculated to ne header until it reaches a set temperature when it is assed from the trough to a storage tank having a side wall ttached to the trough and connected to a heat-exchanger.

Solar energy is conc. on water flowing from the exchanger to a vaporiser where it is evaporated under vacuum nd the vapour sepd. from solids and passed to a condensr. Vapour heat is transferred to water in the vaporiser o preheat the water and the preheated water is circulated. he parent patent claims appts. for desalinating water. 2.1.78 as 869015 Div. ex 4118283(18pp1358)

YDR- ★ D15 89916 C/50 ★US 4235-698
ater treatment to minimise scale formation - by passage through ectric field generated between electrode plates (BR 13.5.80)
HYDROTREAT INC 10.10.78-US-949957
J03 X25 + P41 (25.11.80) B03c-05 C02f-01/48 C10g-33/02

fluid treatment apparatus for scale control comprises an pen-ended support holding two sets of parallel electrodes, ne set carrying a positive electrical charge and the other et a negative charge. The sets of electrodes support an lectric field having a potential voltage 0.7 volts. The ets of electrodes are arranged to be in direct electrical ontact with freely circulating fluid.

The appts. is used to minimise scale formation in a circulating fluid system, e.g. water heaters, heat exchang-ers or boilers. Shut-down time for scale removal is minimised. 10.10.78 as 949957(12pp295)

CONO ★ D15 89925 C/50 ★US 4235-712
Removal of water-soluble anionic surfactants from water - by emulsifying with a nonionic surfactant and a hydrocarbon, breaking and sepg. off purified water layer
CONOCO INC 05.04.79-US-027211
A97 (A25) (25.11.80) C02f-01/26

Water-soluble aniomic surfactants (I) are removed from water by (a) forming an emulsion of the (I)-contg. water, a noniomic surfactant (II) and a liq. hydrocarbon (III); (b) breaking the emulsion to form an aq. layer and a hydrocarbon layer (I) and (II); and (c) sepg. the aq. layer from the hydrocarbon layer.

Specifically (I) is an alkali metal salt of an alkaryl sulp-honate of equiv. wt. 250-500(pref. 300-400) or an alkali metal salt of a 12-18C (pref. 16-18) fatty acid. The amt. of (I) is the water is 0.001-10 wt.%. The amt. of (II) to (I) is 01-10 (pref. 0.5-1) pts. by wt.; and the amt. of (III) to aq. soln. of (I) is 0.1-10 (pref. 0.5-2) pts. by vol.

(II) is an alkoxylated 10-20C alcohol whose alkoxy gp. co-ntains 2-4C (pref. 2) atoms, the number of alkoxy gps. bine 10-100(pref. 30-70) or an alkoxylated mono- or di-8-12C alkyl phenol, whose alkoxy gp. contains 2-4(pref. 2)C atoms, the no of alkoxy gps. being 20-100(pref. 30-70)

The method is esp. applicable where (I) is causing foaming problems in lakes, etc. The (I) is recovered effectively 5.4.79 as 027211(3pp959)

WATE- D15 64631 C/37 =US 4235-715
Removing hardness and alkalinity from water - by sequential treatment with weakly acid ion exchange resins in acid and sodium forms
WATER REFINING 16.02.79-US-012589
*(25.11.80) *EP--15-098 B01j-49 + B01d-15/04 B01d-19*

Water is treated to reduce its alkalinity and hardness by (1) passing through first ion exchange column contg. weak acid cation exchange resin in hydrogen form to convert the alkalinity-causing ions to carbonic acid and to remove hard-dness-causing ions to the extent of the alkalinity.

Then (2) directly passing the effluent through a decarbo-nation unit to remove dissolved CO_2, and (3) directly passing the effluent through a second ion exchange, column contg. a weak acid cation exchange resin in sodium form to replace all residual hardness-causing ions with sodium ions and to neutralise any audity in the effluent.

Both resins can be completely regenerated and the process is carried out with a minimum of monitoring and control. 16.2.79 as 012589(6pp977)

DOWC ★ D15 89927 C/50 ★US 4235-717
Polystyrene ion exchange resin contg. trapped polyacrylic acid - having excess acid gps. for purificn of chlor alkali cell effluent
DOW CHEMICAL CO 22.09.78-US-944688
A91 E36 J03 (A13) (25.11.80) C02f-01/42

An aq. caustic soln. is desalted by contact with an ion exchange resin comprising a bead form of polystyrnee contg. 8% crosslinking with divinyl benzene and having nuclear substd. quat. trialkyl ammonium gps. neutralised by carboxylic acid gps. pendant on polyacrylic acid chains (I) tra-pped in the beads. The improvement comprises having an excess of acrylic acid gps. on (I) to give an exchange capacity of $\Delta C^{+}=O$ and $\Delta C^{-}=X$, where X is 0.4-1 meq./ml of resin.

The ion exchange resins are very effective in absorbing chloride and chlorate ions from alkali metal hydroxide solns. permitting regneration of the alkali soln. 22.9.78 as 944688(5pp928)

LOPE/ D15 73179 A/41 #US 4235-718
Sequenced distribution valve for regeneration of ion exchange plant - comprises hydraulically displaced valve pistons in simple cycle
LOPEZ F 11.01.77-FR-000805 (03.07.78-US-921574)
*(25.11.80) *FR2376-693 + B01d-23/24 B01d-29/42*

Column used to treat water is fed, drained and regenerated using appts. which includes a central distribution value at the column top having 3 chambers in which pistons can sli -de . The valve is connected to a driving mechanism to shi -ft the pistons and so connect various ports. Appts. also includes an injection to injest regeneration agent.

Demanding column can be operated at least semi-automatically. 3.7.78 as 921574(15pp1376)

FMCC ★ D15 89928 C/50 ★US 4235-719

Sewage oxygenation - in high pressure vessel associated with low pressure lock vessel recovering excess oxygen

FMC CORP 27.03.78-US-890725

(25.11.80) C02f-11/02

Appts. for oxygenating a body of liq. has a high pressure oxygenation vessel. A quantitiy of liq. to be treated is first transferred into a lock vessel and isolated from the remainder of the liq. body by valves. The liq. is then tran sferred from the lock vessel to the high pressure oxygenator and an equiv. vol. of oxygenated liq. is returned to the lock vessel.

The lock vessel is depressurised and the liq. returned to the body. O_2 bubbles released during the depressurisation remain in the lock and are returned to the high pressure oxygenator during a following cycle. 27.3.78 as 890725(9pp295).

HANS- ★ D15 89929 C/50 ★US 4235-720

Underwater aerator producing circulation flow of water - includes air diffuser, propeller and water guiding ducts

HANSHIN ENG CO LTD 10.07.78-JA-084447

(25.11.80) C02c-01/02

Aerator comprises a base above which are mounted water ducts, each having a lower inlet opening and an upper outlet directed radially outwards. A motor has a rotatable out -let shaft, on an extension of which is mounted a cylindric -al air diffuser. This is positioned below the inlets of the water ducts. The diffuser has a cylindrical, perforated peripheral wall.

An air supply conduit extends into the bottom of the diff user and in use air bubbles rise upwardly from the perforations to the inlet of the water ducts. A propeller mount -ed on the outlet shaft rotates at a low speed to avoid sludge breakup. It divides the rising air bubbles and creates a continuous recirculation of the waste water and air bubbles.

The aerator is installed in the bottom of a waste water purifying tank. The tendency for clogging of the air diffuser is minimised. The finely divided air bubbles become entrained in the water flow and thus the waste water is com -pletely aerated even in the corners and bottom of the tank. 20.3.79 as 022356(6pp295)

DAIL . D15 00305 B/01 =US 4235-722

Liquid treatment using folded membrane - having outer cylinder with folded membrane element around central collector

DAICEL KK 20.12.77-JA-U72560 (13.06.77-JA-U77449)

*J01 (25.11.80) *DT2825-698 B01d-31*

Treatment mixt. to separate a non-diffused liq. froma product liquid consists of a semi-permeable membrane mo -dule in a pressure resistant cylinder. The module has a channel concentric with the cylinder for recovery of the product. a strip of synthetic resin semi-permeable membrane connected by adhesive to the channel and alternately, folded to provide feed liquid and product liquid passages on the front and rear faces, and spacers in the feed passages. The back face of the membrane is fabric covered. The feed, non-diffused, and product liquids flow in the same direction.

Membrane is easy to clean dna dead space is reduced. 15.5.78 as 906076(+11.6.77,28.9.77-JA-082686,V30859) (12pp1376)

HYDN D15 87640 C/49 =US 4235-723

Membrane module for reversed osmosis - has spirally-wound flow passages and membranes without folds spaced by gauze

HYDRONAUTICS INC (HYDR-) 15.05.79-US-039209

*(25.11.80) *NL8001-712 +B01d-31*

A spirally wrapped reverse osmosis module membrane, e.g. for recovering purified from brackish or sea water comprises a mandrel with an axial passageway for produ and a flow guide spirally wrapped around the mandrel an communicating with the passageway. Rectangular membr ne envelopes formed from permeate collector and folded support sheets are also wrapped around the assembly.

Each support sheet has membrane areas where rever osmosis takes place and is folded in a non-osmosis area to eliminate fold lines on osmosis areas. The distance fr the folded edge of each support sheet to the mandrel radi lly increases along a spiral path, and a flow spacer is lo ated between envelopes with one end adjacent the fold. O mosis areas are pref. formed by semipermeable polyme ic coatings and fold areas from a layer of non-permeable coating. 15.5.79 as 039209(8pp1358)

BAUB D15 33251 C/19 =US 4235-72

Waste water screening appts. - with pairs of inclined screens ar water flow controlled to give even flow over all screens

BAUER BROS CO 21.09.78-US-944545

*(25.11.80) *GB2032-294 B01d-23/02*

Waste water treatment system consist of a conduit for co -monly feeding screens forming descending flow surfaces The conduit is arranged below the upper end of the screen and has openings which direct the water to the upper ends The passage defined by the conduit is reduced in area at each opening to induce equal discharges of water at the openings. A head box pref. directs the water from each opening to the upper end of the screen.

System is economical and unlikely to suffer breakdown 21.9.78 as 944545(8pp1376)

PETL ★ D15 89973 C/50 ★US 4235-80

Alpha-amino-phosphonic acid prepn. - by reacting an oxazolidin with phosphorous acid

PETROLITE CORP 12.08.76-US-713705

C01 E11 M14 (25.11.80) C07f-09/38

α-Amino-phosphonic acids are prepd. by reacting an oxaz olidine with phosphorous acid in substantially stoichiomet ric proportions at temps. below the decomposition point o the reactants and prods. Pref. reaction temp. is 60-250°C

The prods. are used as e.g. scale inhibitors, corros- ion inhibitors, chelating agents and biocides. 12.8.76 as 713705(7pp476)

HAND/ ★ D15 89993 C/50 ★US 4235-849

Pellet dispenser for purifying well water - is driven by power source actuated in response to water flow from well

HANDELAND G A 10.05.78-US-904465

(25.11.80) B01d-11/02

Pellet dispenser for dispensing purifying pellets into a wal in response to water flow from the well comprises a pellet chamber having an inclined bottom wall through which a pellet dispensing tube extends into communication with the well. A false bottom wall in the chamber maintains the lev -el of the pellets in the chamber below the open upper end of the dispensing tube. A pellet conveying disc. for deposi -ing pellets individually in the tube is driven by a power source actuated in response to water flow from the well.

The number of pellets dispensed into the well is a dir- ect function of the time that water is actually being pumpe from the well. 10.5.78 as 904465(10pp67)

CTWO- ★ D15 90113 C/50 ★WP 8002-556

Waste water treatment by trickling filtration - with double passage of effluent through single particulate bed carrying aerobic organisms

C2F INVESTMENT CO 21.05.79-US-040715

(27.11.80) C02f-03/30

D/S: N(AU, JA) + E(DT, FR, GB, NL, OE, SW).

Waste water is gravity settled to yield an anaerobic effluent which is distributed beneath the upper surface of a particulate bed. This is conducive to the growth of aerobic organisms. The effluent is retained in the bed for a predetermined time before displacement as an aerobi-

ally treated effluent.

The effluent is redistributed over the same bed for retention for a second predetermined period sufficient for the aerobic bacteria to reduce the bacterial count. This second effluent contains dissolved and free oxygen which is used by the aerobic bacteria within the bed. The final effluent is collected.

The method is used to treat settled sewage effluent and render it suitable for reuse in urinals or in the land.

21.5.80 as US0607 (25pp295).
(E) ISR: US2220859; US3623976; US2283166; US2142196; US3681236; US4086167; US3617540; US3956128; US2694043; US3143498; US3238124; CA1041231; AU-150870; DT2731887.

See Also

D16 GB 1580944

D16: FERMENTATION INDUSTRY

SEAR ★ D16 88368 C/50 ★BE-883-564
Plasmids useful as vectors for eucaryotic DNA - with bacterial promoter controlling transcription and translation
SEARLE G D & CO 01.06.79-GB-019245
B04 (01.12.80) C12n

New plasmids contain a site of introduction for a eucaryotic DNA fragment next to a bacterial promoter and downstream of a binding site for procaryotic ribosome and an initiating codon, such that the promoter governs or regulates the transcription and translation of the introduced DNA fragment.

7 Plasmid designated pEH3; pEH4; pEH5; pwT101; pwT111; pWT121, and pW131 are characterised. Also new are (i) nic derivs. of these plasmids; (ii) plasmids into which DNA fragment has been introduced; and (iii) cells contg. DNA-fragment contg. plasmid.

The plasmid are vectors for DNA; cells contg. plasmids with the DNA fragment incorporated will express the appropriate protein. The introduction of the gene for fowl pest virus (FPV) haemagglutine into pWT121 is specified. 30.5.80 as 883564 (58pp1251)

CIL ★ D16 88372 C/50 ★BE-883-587
Improving ruminant response to Clostridium vaccines - by admin. together with tetramisole or levamisole
ICI AUSTRALIA LTD 31.05.79-AU-009014
B02 C02 (B04 C03) (01.12.80) A61k C07d

An adjuvant effect in ruminants is prod. by administering, together with a vaccine against Clostridium infections, tetramisole (I), levamisole (II), or their acid addn. salts. Pref. the vaccines contain antigens derived from C. welchii, C. chauvoei, C. Septicum, C. tetani and/or C. novyi, and the pref. adjuvants are the hydrochlorides or dihydrogenphosphate of (II).

The adjuvant can be given before, during or after vaccination, but pref. together with the vaccine, esp. subcutaneously at $\geqslant$1 mg/kg.

(I) and (II) are already known as anthelmintics, and vaccination and anthelmintic treatment can now be combined in a step. The adjuvant greatly increases the response of animals esp. cattle or sheep, to the vaccines which are used to protect against dysentery; enterotoxaemia; gangrenous septicaemia, tetanus; symptomatic anthrax and 'black disease' of sheep. 30.5.80 as 883587 (27pp1251)

ST/ ★ D16 C/50 ★CS 7903-351
Defoaming agent for fermentation industry
LIST J 16.05.79-CS-003351
(29.08.80) C12n-01/38

LASO/ ★ D16 C/50 ★CS 7904-785
Enzyme fixing and separation
LASOVSKY J 06.07.79-CS-004785
(29.08.80) C12n-11

LASO/ ★ D16 C/50 ★CS 7904-786
Microorganisms adsorption on solid carrier
LASOVSKY J 06.07.79-CS-004786
(29.08.80) C12n-11

LICK/ ★ D16 C/50 ★CS 7905-221
Lysine biosynthesis optimisation and regulation
BUCKO M 26.07.79-CS-005221
B05 E16 (29.08.80) C12p-13/08

ROTK- D16 06745 U/06 =DS 2220-648
Coffee-contg sparkling wine - prepd from champagne-type wine and coffee, wine and sugar mixt
VEB ROTKAPPCHEN-SEK (PIE /) 20.12.71-DL-159733
*(04.12.80) *DL--93-980 C12g-01/06*

Coffee flavoured sparkling wine is obtd. by mixing crude champagne and a dose comprising about two pts. wt. coffee extract two pts. wt. wine and three pts. wt. sugar in a ratio of champagne to dose of 5:1 to 8:1. After mixing the liquor is pref. stored at 2-4°C and 3-5 kp/cm^2 for 24 hours, stabilised with gelatine, cold stabilised at -4°C for 4 days, filtered and stored at 15°C for 21 days. 27.4.72 as 220648(3pp068)

ANVR D16 12599 A/07 =DS 2734-660
myxomatosis vaccine prodn. from attenuated virus strain - by passaging on rabbit kidney and chicken embryo cells
AGENCE NAT VALORISATION 05.08.76-FR-024243
*B04 C03 (04.12.80) *DT2734-660 A61k-39/15*

Veterinary injection for protecting rabbits and hares from myxomatosis contains rabbit kidney cell products or hen embryonal cell products after treatment with myxomatosis virus (1 Institut Pasteur, no. 1028). Prepn. of these compsns. comprises propagation of a cell culture in the presence of the virus; isolation of the cell contents (pref. with 50.200 50% infection units), and opt. freeze drying. 1.8.77 as 734660 (4pp047)

MOCH D16 27221 A/15 =DS 2743-444
Immunochemical assay using labelled antibody - employs antigen rendered insoluble and being of same substance as antigen substance to be measured NL 3.4.78)
MOCHIDA SEIYAKU KK 30.09.76-JA-117621
*B04 J04 S03 (S05) (04.12.80) *DT2743-444 G01n-33/54*

Immunochemical determination of antigens comprises treatment of samples with an insoluble form of the same antigen and a marked antibody to the given antigen, followed by dilution analysis. Fragments derived from papain or pepsin, and reduced fragments of the antibody are used to prepare the marked antibody. Process is applicable to substances of high Mr, the so-called complete antigen, or substances of lower Mr, the so-called haptene. 27.9.77 as 743444 (14pp047)

AIRL D16 00263 B/01 =DS 2823-469
Tetracycline antibiotics fermentation prodn. - using oxygen-enriched air for aeration
AIR LIQUIDE L' 01.06.77-FR-016674
*B05 (04.12.80) *DT2823-469 +C12p-15*

Process for the prodn. of tetracyclin antibiotics comprises propagation of Streptomyces species in the presence of an O_2-enriched atmosphere (21-40 vol. % O_2); the O_2-rich atmosphere is bubbled through the culture medium and reinforced from time to time with increasing amts. of O_2, so that the dissolved O_2 content is at least 0.3 ppm. 30.5.78 as 823469 (3pp047)

ppm., 3.8 ± 0.1 ppm., 5.0 ± 0.1 ppm. and 5.4 ± 0.1 ppm. and no absorption at 4.4-4.9 ppm. (I) is soluble in water and insoluble in pyridine, chloroform and hexane.

The saccharide portion of (I) is mainly α-bonded D-glucose with molar ratios of linkages in the saccharide portion relative to the $G^1 \longrightarrow$ end being $\longrightarrow {}^4G^1$ - 3.5-8.5; ${}^3G^1 \longrightarrow$ <2, $\longrightarrow {}^4G^1{}_6 \longrightarrow$ 0.5-0.2, $\longrightarrow {}^4G^1{}_3 \longrightarrow$ 0.1-2.5, $\longrightarrow {}^3G^1{}_6 \longrightarrow$ 0. When the non-reducing end group ($G^1 \longrightarrow$) content of monosaccharideas measured in a methylation hydrolysis test according to Haworths' method is taken as 1.

(I) have anti tumorigenic activity and are active when admin. orally. (I) are obtd. from Basidiomycetes fungi by culturing. 26.1.78 as 003251. (22pp918)

INTE- D16 49683 A/28 =GB 1581-403

Culture of aerobic microorganism for antibiotic and enzyme prodn. - using hydrogen peroxide as oxygen source and e.g. alkane or alcohol as carbon source

INTEROX 10.01.77-LU-076547

*C03 (10.12 80) *BE-862-621 C12r-01/05 + C12n-01*

Culture of aerobic microorganisms in a media provided with a O source by decomposition of H_2O_2 and C and H source from at least one highly inflammable cpd. or mixt. pref. light hydrocarbons, esp. methane, their oxygenated derivs. or a mixt. of H with CO and/or CO_2.

Rate of growth of the microorganisms is excellent. Process also enables any risk of ignition of the substrates used to be ameliorated. 10.1.78 as 000941. (8pp937)

SATO/ ★ D16 88841 C/50 ★J5 5137-186

Soil improving compsn. - contg. bacteria, fungi and yeast cultures which accelerate decomposition of organic matter

SATO I 11.04.79-JA-043810

*C03 (25.10.80) C09k-17 C12n-01 C12r-01/**

Soil-activator comprises cultures obtd. by cultivating thermophilic cellulose-decomposing bacteria, (I) purple non-sulphur bacteria (II), Actinomycetes, (III), mould fungi (IV), yeast (V), and bacteria of subtilis gp. (VI), and excipient comprising mainly basic rock powder.

The cultures improve the soil environment and accelerate decomposition of organic materials contained in the soil. The excipient comprising mainly basic rock powder improves drainage, breathability, water-absorbing property and water-holding property of the soil. It also as as fertiliser as it has a high content of basic elements such as Mg, Ca and K. (I) are e.g. Crostridium thermocellum, Bacillus thermocellulolyticus,, Bacillus cellulose dissolvents. (II) aree .g. Rhodopsendomonas capsulatus and Rhodospirillus rubrum, (III) are e.g. Actinomyces melanosporeus, Act. melanocyclus, etc., (IV) are e.g. Mucorales, Trichoderma, Aspergilli and Penicillia. (V) are e.g. Hansenula, Endomyces, Saccharomyces, etc., (VI) are Bacillus subtilis, Bac. mesentricus, Bac. mycoides, etc., 14.4.79 as 043810 (8pp108)

NICH- ★ D16 88851 C/50 ★J5 5137-212

Prodn. of very fine PVA fibre - useful for artificial suede prodn., as enzyme carry and as ion exchange fibre

NICHIBI KK 11.04.79-JA-043105

A14 F01 J01 (A32) (25.10.80) D01f-06/50

Blended yarn consisting of (a) water soluble polymer with low crystallinity and (b) Na is washed in water under ultrasonic vibration to dissolve out (a) and produce Na fibre of size < 0.1 μ.

After removal of (a), the fibre may be acetalised with aldehyde and subjected ultrasonic vibration in water. The blended yarn is obtd. by dry spinning of a mixt. of water solns. of (a) and (b) in 40:60-80:20, pref. 50:50-60:40: calculated as solids. (a) are e.g. polyethylene oxide with mean mol. wt. 3000 to 4 million and PVA with average polymerisation degree 500-2000 and saponification degree of 83 to 93 mol%.

The fibre is useful as base material for artificial suede, carrier fibre for enzyme fixation, ion exchange fibre, etc. 11.4.79 as 043105 (5pp172)

SEIS ★ D16 89050 C/50 ★J5 5138-3

Cultivating Rhodopseudomonas microorganism - with control concn. of main carbon sources, e.g. fatty acids or glucide(s)

SEISAN KAIHATSU KAGAKU 12.04.79-JA-045090

(29.10.80) A23k-01 C02f-03/02 C12n-01/20 C12p-07/66

In the continuous cultivation of microorganisms belonging to the genus Rhodopseudomonas. typically Rhodopseudomonas capsulatus. the improvement comprises controlling the concn. of main C sources, e.g., fatty acids or glucides, inthe culture not to exceed 10 (pref. 1) mmol.

The carbon source concn. can be determined by gas chromatography, high speed liquid chromotography, enzymatic analysis or colorimetric analysis.

In the relationship between the cultivation time and absorbance (concn. of the strain) with the initial substrate concn. of carbon sources being varied, the rate of production of mycelia is greatly increased when compared with the conventional cultivation employing 33-83mmol of carbon source concns. 12.4.79as 045090 (5pp140)

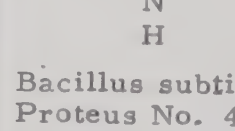
ELED ★ D16 89051 C/50 ★J5 5138-38

Aminoalcohol prepn. - by contacting alkyl or aralkyl substd ethyleneimine with microorganism of genus Bacillus, Proteus Erwinia or Klebsiella

DENKI KAGAKU KOGYO CO 14.04.79-JA-045899

E16 (E14) (29.10.80) C12p-13

A cpd. of formula (I) (where R is opt. substd. alkyl, or aralkyl) is contacted with microorganism of genus Bacillu



(I)

Proteus, Erwinia or Klebsiella, whereby there is produced amino alcohol.

Typically microorganisms are Bacillus subtilis FERM 4760, Erwinia No. 36 FERM 4761 Proteus No. 43 FERM 4762, and Klebsiella No. 59 FERM 4763. The culture medium is one contg. conventional C source, N cource, inorganic salt, vitamins, aminoacids, and other additives. Concn. of the starting material in the medium is 0.01-0.5 wt.%. Thecultivation is conducted at 25-40°C at pH 5-8 for 10-70 hours, under aerobic conditions. The amino alcohol produced is recovered conventionally. 14.4.79 as 045899 (6pp22)

MITU ★ D16 89053 C/50 ★J5 5138-394

Fermentative prepn. of androstane - using Mycobacterium Diernhoferi mutant strain and sterol sterol

MITSUBISHI CHEM IND KK 13.04.79-JA-044949

B01 (29.10.80) C12p-33 C12r-01/32

Androstane cpd. is prepd. by culturing mutant strain belonging to the genus of Mycobacterium diernhoferi, using sterol substrate as Androstane type cpd. is prepd. in high yield without by-prod. formation. It is possible to conduct cultivation at high concn. of substrate. The yield is in proportion to the substrate concn.

In an example, one loopful of M. diernhoferi MCI-1299 is inoculated to a seed culture, and cultivation is conducted for 48 hours under shaking. 2ml of obtd. seed culture is inoculated to 10 flasks each contg. 50 ml of medium. Cultivation is conducted at 30°C for 200 hours under shaking. The culture is extracted with 2l of ethyl acetate, and the content of steroid is analysed by gas chromatography. 1.37 g of ADD, 0.23 g of 4AD, 0.03 g of DHT are produced. 13.4.79 as 044949 (6pp108)

MITU ★ D16 89054 C/50 ★J5 5138-395

Fermentative prepn. of androstane(s) - by culturing mutant strain of Mycobacterium para:fortuitum

MITSUBISHI CHEM IND KK 13.04.79-JA-044950

B01 (29.10.80) C12p-33 C12r-01/32

Prodn. of 9α-hydroxyandrosta-4-ene-3, 17-dione (I) comprises culturing mutant strain belonging to the genus of Mycobacterium parafortuitum, using as substrate sterol (I) is prepd. in high yield from cheap sterols. (A) is an important precursor for the prodn. of corticoide.

In an example, one loopful of MCI-1297 is inoculated to 100 ml of seed medium (pH 7.2), and cultivation is conducted for 48 hrs. under shaking. 2ml of the seed sulture is inoculated to 10 flasks each containing 50 ml of medium. Cultivation is conducted for 210 hours at 30°C.

ne culture is extracted with 1 l of ethyl acetate. The eroid content is analysed by gas chromatography and 38 g of (I) is obtd. 13.4.79 as 044950 (5pp108)

KE- ★ D16 89055 C/50 ★J5 5138-398
olorimetric measurement of lactic acid dehydrogenase - by eacting on lactic acid in presence of NAD to produce pyruvic acid, hen colorimetrically measuring hydrogen peroxide prodn. from this
EIKEN KAGAKU KK 16.04.79-JA-045494
(29.10.80) C12q-01/32

nzyme for dehydrogenation of lactic acid acts on lactic cid in the presence of nicotinamide adenine dinucleotide NAD) to produce pyruvic acid, which is oxidised to pro- uce H_2O_2. This is cont cted with a material which gives olour on contact with H_2O_2, and the resulting colour is easured colorimetrically. The oxidation of pyruvic acid s achieved enzymatically, the enzyme used being pro- uced by microorganisms e.g. those belonging to the genus actobacillus. The material which gives colour on con- acting with H_2O_2 includes aniline, dimethyl aniling, toluid- ne, phenol, cresol. etc. 16.4.79 as 045494 (4pp22)

AIN ★ D16 89056 C/50 ★J5 5138-399
tabilised compsn. for beta-D-galactosidase determn. - comprising rtho-nitrophenyl-beta-D galacto:pyranoside and at least one of thylene or propylene glycol, methanol, N-propanol, glycerol etc.
DAINIPPON PHARM KK 13.04.79-JA-045912
E14 (29.10.80) C12q-01/34

ompsn. for determining α-D-galactosidase (β-gal.) omprises o-nitrophenyl-β-D-galactopyranoside (ONPG) nd 1 alcohol selected from ethylene glycol, methanol, ropylene glycol, n-propanol, glycerol and triethylene lycol. Determ. comprises adding the compsn. to a sample release o-nitrophenol and colorimetrically determining e absorbance of yellow colour developed. Pref. a soln. ONPG dissolved in a 35-60%(v/v) ethylene glycol aq. oln. at a concn. of 0.5-1.0% (w/v) is added to a sample in uch an amt. that the sample has an ethylene glycol conc, 4-10% (v/v) and an ONPG concn. of 0.08-0.17% (w/v). oncn. of alcohol for dissolving ONPG is 5-100 % (v/v), ef. 20-80%, esp. 40-80%.

Substrate ONPG, easily undergoes non-enzymatic hy- olysis to develop yellow colour ascribed to o-nitriphenol, sulting in difficulty of determn. Alcohols possess β-gel tivating activity and also ONPG stabilising activity so, nprove sensitivity 2-3 times over conventional method. .4.79 as 045912 (6pp140)

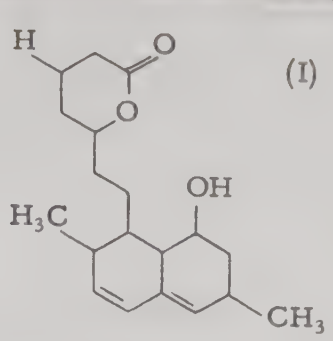
NO ★ D16 89072 C/50 ★J5 5138-743
ing soln. for silver halide photographic material - contains at st one protein-decomposing enzyme e.g. trypsin
CANON KK 18.04.79-JA-047518
G06 P83 (29.10.80) G03c-05/38

e photographic material is prepd. by coat ing a glass te with a photosensitive emulsion (e.g. holographic ulsion, etc.) under exposure to light using a negative sk. The exposed photosensitive material is then treated th developer, bleaching soln. and the fixing soln. (e.g., 0 ml. water + 250 g Na thiosulphate + 5 g trypsin + water give a 1,000 ml. soln.).

The fixing is used to prepare a relief pattern e.g. holo- am or similar imaging medium, of greater depth. .4.79 as 047518 (5pp173)

DO/ ★ D16 89238 C/50 ★J5 5139-396
ocholesterolaemic monocolin J - produced by aerobic tivation of Monascus ruber
ENDO A 13.04.79-JA-044249
B03 (31.10.80) A61k-35/84 C07g-17 C12p-01/02 C12r-01/64

vel physiologically active substance Monacolin J is a ite powder which has elemental analysis C, 71.45%; H, 5%; O, 19.90%; mol. wt. 320 (as Mass spectra and lecular formula: $C_{19}H_{28}O_4$ (I). Its US, IR and NMR spec a and TLC data are given. It is soluble in (m)ethanol,



(I)

propanol, acetone, ethyl acetate, chloroform and benzene; insoluble in hexane and petroleum ether.

13.4.79 as 044249

BENC D16 60365 U/41 =J8 0044-596
Citric acid prepn - from linear paraffins by bacterial fermentation using yeasts, with coupling inhibitor addn
BENCKISER J A GMBH 17.03.72-DT-212929
*E17 H04 (13.11.80) *DT2212-929 +C12p-07/48 C12r-01/72*

Citric acid and citrate salts, useful in food, pharmaceutic -al and cosmetic inds. are prepd. free from iso-citric acid, by cultivating a yeast capable of growth at a high fluoroacetate concn. esp. a Candida oleophila or lipolytica species, and fermenting it in an aq. nutrient medium contg 5-20 vol % of ⩾ one 9-20C n-paraffin, under addn. of a cpd. (I) having a de-coupling activity esp. at pH 2-8(5-7) in presence of a neutraliser, e.g. $NaHCO_3$ and at 20-35 °C until citric acid has collected in medium in high concn. and recovering it from nutrient soln. as such or as alkali or alkaline earth salts.

Pref. yeast is treated with mutation-producing agents and selected after growth in a nutrient medium with rising fluoroacetate concn. De-coupler may be 2,4-dinitrophenol, added to medium esp. after 24 hrs. in 1×10^{-2} to 1×10^{-5} mol/l concn. 16.3.73 as 030202 (clg.17.3.72-DT-212929) C12p-7/48, C12r-1/72 (13.11.80) JOH A BENCKISER GMBH (6pp) (J49012091)

KYOW D16 92987 R/50 =J8 0044-597
L-lysine prepn
KYOWA HAKKO KOGYO KK 09.06.69-JA-044624
*B05 (13.11.80) *NL7008-361 +C12p-13/08*

Mutant of genus Corynebacterium, resistant to Penicillin G or Polymixin B and capable of producing L-lysine or a mutant which of genus Brevibacterium resistant against PenicillinG and capable of producing L-lysin, is cultivated in a nutrient medium, and L-lysine produced is recovered from the culture medium. Typical examples of the microorganisms used are Corynebacterium glutamicum M-901-No.2347-TA 18(ATCC 21513), -TA26 (ATCC 21514) Brevibacterium flavum S-5-PB 27 (ATCC 21517), -S-5 (ATCC 21127), Corynebacterium glutamicum M-901 No.2347-TA 52(ATCC 21516), etc. The culture medium contains C source such as glucose, sucrose, etc. N source such as ammonium sulphate, ammonium chloride, urea, etc. inorganic salt such as K hydrogen phosphate, $MgSO_4$, $CaCO_3$ etc. vitamins, aminoacids, natural nutrient substances, etc. The cultivation is conducted at ≈24-37C at pH 5-8.5 for 2-5 days.

L-lysine can be obtd. at high yield and at high reproducibility. Recovering and purification of L-lysine from the culture medium can be carried out. 9.6.69 as 044624, C12p-13/08 (13.11.80) KYOWA FERMENTATION KK (6pp22)

PERC D16 51046 X/27 =J8 0044-598
16 Alpha hydroxy-dehydro-epi-androsterone prepn - by culturing Streptomyces in presence of dehydro epiandrosterone
PERMACHEM ASIA LTD 18.11.74-JA-132043
*B01 (13.11.80) *J51057-886 +C12p-33/14 C12r-01/46*

16α-Hydroxy-dehydroepiandrosterone (I) or its labelled cpd. is obtd. by cultivating streptomyces in the presence of dehydroepiandrosterone or its labelled cpd. (I) is adreno -cortical steroid hormone existing only in foetus, an important precursor for the base of placental estriol, and can be used as an index of foetal adrenal glands-liver series function by determining. (I) The labelled cpds. are important for quantitative analysis of the steroid. In an example, Streptomyces roseochromogenes NRR-B-1233 was grown on Bennet slant culture at 27°C for 48 hrs.and then inocul-

ated on 100 ml of the culture of pH 7.2 consisting of 3% of glucose, 2% of soya bean powder, 0.22% of soya bean oil and 0.25% of calcium carbonate in a 500 ml Erlenmeyer flask, From 10 mg of substrate was yielded 8.5 g of the objective substance. 18.11.74 as 132043, C12p-33/14, C12r-1/465 (13.11.80) PERMACHEM ASIA LTD. (3pp) (J51057886)

MITB ★ D16 89331 C/50 ★J8 0044-651

Appts. for removing bubbles e.g. from cultures of microorganisms - comprises a conical guide for bubble collection and rotary blade assembly

MITSUI SHIPBUILDING ENGG 24.04.78-JA-048394

(13.11.80) B01d-19/02

A structure for debubbling a liq. contained in a culture tank of microbe etc. which produce bubbles, is new. It comprises a conical guide for collecting ascending bubbles in the tank, and rotary blade assembly disposed above the guide to debubble the liq. 24.4.78 as 048394, B01d-19/02 (13.11.80) MITSUI SHIPBUILDING ENG. (5pp26) (J54140269)

TOXN D16 28201 W/17 =J8 0044-725

Microbial cell bodies microencapsulation - using nontoxic encapsulating polymers, and higher fatty acid or wax

TOYO JOZO KK 10.05.73-JA-052349

*A97 B04 (13.11.80) *J50004-232 +A61k-09/56 C12n-01/20*

Microbial cell bodies with therapeutic effect were microencapsulated with nontoxic encapsulating polymers, and ≥ 1 of wax, higher fatty acids, and their H_2O-insol. salts. In an example, a Bacillus cereus cells and Mg stearate mixt. was dispersed uniformly in a CH_2Cl_2 soln. contg. poly(vinyl acetal) diethylaminoacetate and a wax. Microcapsules (15-75 u) were obtd. after spray-drying. 10.5.73 as 052349, A61k-9/56, C12n-1/20 (13.11.80) TOYO JUZO CO. LTD. (5pp) (J50004232)

KITA D16 82173 Y/46 =J8 0045-045

Poultry coliform bacillus inactivated vaccine - for prevention of poultry colisepsis

KITASATO RES INST 02.04.76-JA-036939

*B04 C03 (15.11.80) *J52120-116 A61k-39/10*

Coliform bacillus having mostly the blood serum type 01:K_1, 02:K_1, and 078:K_{80} and K antigen, are cultured generally in agar or bouillon medium for 18 hrs. at 37°C. The cells are then collected and the condn. is adjusted to > 5 x 10^{10}/ml. The resulting liq. is heated or treated with formalin for sterilisation and alum. gel added as adjuvant. Similar colisepsis preventing effect is obtd. using a vaccine prepd. by mixing the present vaccine and hen coryza vaccine in the equal. amts.

In an example, the strains of coliform bacillus sepd. on the agar plate medium from the heart blood of a hen suffering from colisepsis by infection with coliform bacillus are collected, and the strains having the antigens 01:K_1; 02:K_1 and 078:K_{80} and K antigen, are separately cultured on the agar mediums at 37°C for 18 hrs. The cells are then collected in a soln. of NaCl and the concn. is made to > 3 x 10^{10}/ml. The liquids are inactivated by heating at 58°C for 60 mins. These liquids are combined in the same amts. and added to Al hydroxide gel. 2.4.76 as 036939, A61k-39/108 (15.11.80) KITASATO RES. INST. (2pp) (J52120116)

CHLO- D16 76952 T/48 =J8 0045-182

Powdery chlorella extract prodn - having reduced hygroscopicity

CHLORELLA IND CO LT (CHL-) 26.03.71-JA-017510

*C03 (D13) (17.11.80) *J47025-380 +A23l-01/34*

Process comprises extracting soluble components of chlorella with water by heating, removing coagulated soluble proteins by boiling the soln. mixing the soln. with dextrin, gum arabic, and glucose in ratios of 20-30%, 50-60%, 5-10%, and 5-10% respectively and drying the resultant soln. prepd. as described above is dried by the usual means, such as vacuum drying, freeze drying, hot air drying, and spray drying and the dried solid is ground into powder. 26.3.71 as 017510, A23l-1/34 (17.11.80) CHLORELLA IND CO. LTD. (3pp) (J47025380)

IDEK D16 57818 W/35 =J8 0045-19

Aerobic cultivation of micro-organism e.g. Nocardia corallina using a lower olefin hydrocarbon

IDEMITSU IND KK 00.00.74-JA-042764

*E17 (17.11.80) *J50046-887 +A23k-01 C12n-01/26 C12r-01/36*

In an example, a microorganism was cultured at 30° for 120 hr. in a medium contg. $NaNO_3$ 12, $Na_2HPO_4 12H_2O$ 3, KH_2PO_4 2, and $MgSO_4 7H_2O$ 0.5g, plus $FeSO_4 7H_2O$ 30, $CaCl_2$ 60, $MnCl_2 4H_2O$ 60 and yeast ext. in 1 l. enclosing 17 vol % propylene (based on the gas phase). Cell yield was 80% of the added propylene. Elemental anal. of the cell was C: 43.4, H: 6.3, and N: 8.5%. 26.3.71 as 007367 C12n-1/26, C12r-1/365, A23k-1/00 (17.11.80) IDEMITSU INDS KK (3pp) (J50046887)

WELL D16 14489 T/09 =J8 0045-192

Vaccine against foot-rot in sheep - produced from fusiformis nodosus cultures

WELLCOME FOUNDATION LTD 20.08.70-GB-040260

*B04 C03 (17.11.80) *BE-771-536 A61k-39/02 C12r-01/ +C12n-01/38*

Fusiformis nodosus, which together with Fusiformis necrophorus causes foot-rot in esp. in sheep, is cultured under anaerobic conditions in a liquid nutritive medium which contains a soln. of a product obtd. by extracting, macerating or infusing liver, the cultivation taking place in the presence of a gaseous atmos. which is CO_2 or a mixt. contg. ≥ 60 vol % CO_2 and an inert gas, the vol. of CO_2 in the gaseous atmos. not exceeding 30% of the vol. of the liquid medium.

The vaccine is prepd. by sepg. the microorganisms from the culture medium and killing them, pref. with formalin. The killed bacteria may be incorporated into the aq. phase of an O/W emulsion. 19.8.71 as 063305 (clg.20.8.70-GB-040260) C12n-1/38, C12r-1/01, A61k-39/02 (17.11.80) WELLCOME FOUNDATION LTD. (8pp) (J47005047)

AJIN D16 41819 W/38 =J8 0045-193

Novel antibiotic cytrimycin - produced by Streptomyces species

AJINOMOTO OCEA 13.06.73-JA-065823

B04 (17.11.80) DJ50013-593 +C07g-11 C12p-01/06 C12r-01/46

A novel antibiotic, cytrimycin (I) was produced by Streptomyces katsunumaensis nov. species (FERM-P 2071) together with chromomycin A_2 and A_3. In an example, microorganism was cultured on a medium (pH 6.4) contg. yeast 2.5, Ralex 2.0, sol. starch 1.0, $MgSO_4$ 0.05, and K_2HPO_4 0.05% at 28° for 3 days. I in 78 l culture filtrate was extd. with 78 l. EtOAc and concd. to dryness yielding 19.5g yellowing brown powder.

The crude prepn. was dissolved in 250 ml MeOH, the Ralex was removed by n-hexane extn. and dried yielding 16.0 powder. It was dissolved in 500 ml EtOAc and I and chromomycin A_2 were extd. with Et_2O. I and chromomycin A_2 were sepd. by a silica gel chromatog. yielding 287 mg I. It was further purified by a silica gel thin layer chromatog. yielding 53.8 mg pure prepn.

It had mol. formula of $C_{60}H_{88}O_{26}$, and m.p. at 178-81°. It was sol. in MeOH, EtOH, Me_2CO, MeCOEt, $CHCl_3$, EtOAc, and dioxane, and was pos. in Molish, Fehiling, and anthrone's reaction. In I, chromose D of chromomycin A_2 was substituted with 3-O-propyldeacetyl chromose D. It was effective against gram pos. bacteria, esp. against Nanthomonas. Toxicity of I against mice was LD_{50} = 1.0-1.5 mg/kg by i.p. injection, 13.6.73 as 065823, C12p-1/0 C07g-11/00, C12r-1/465 (17.11.80) AJINOMOTO OCEA (9pp) (J50013593)

MEIJ D16 45158 W/27 =J8 0045-194

Antibiotic SF-1508 prepd from Streptomyces hygroscopicus in culture medium contg sucrose, soybean powder wheat germ and sodium chloride

MEIJI CONF 28.06.73-JA-072317

*B04 (17.11.80) *J50019-992 +C07g-11 C12p-01/06 C12r-01/46*

Novel antibiotic, SF-1508, was produced from Streptomyces hygroscopicus SF-1508 (FERM-P 1997). In an example the microbe was cultured on 5 l. medium (pH 7.0) contg. sucrose 4.0%, soybean powder 3.0%, wheat germs 2.0% and NaCl 0.6% at 28° for 4 days. The culture broth was

ered at pH 3.0 and the SF-1508 was adsorbed on Dowex
x 2 (H^+) and eluted with 0.5N, NH_4OH. The eluate was
cd. and passed through a column of Dowex 1 x 2(CO_3^{2-}).
1508 was eluted with water and crystallised from the
cd. eluate yielding 200 mg needle-like crystals. SF-
8 had mol.wt. 580, and elemental analysis of C:50.28%.
.23% and N:11.68%. 28.6.73 as 072317, C12p-1/06,
7g-11/00, C12r-1/465 (17.11.80) MEIJI CONF (6pp)
0019992)

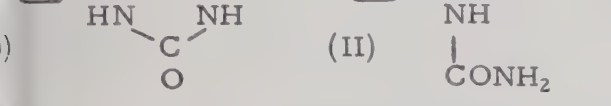
NF D16 39559 A/22 =J8 0045-195

N)-carbamyl-phenyl-glycine derivs. prodn. - from 5-phenyl dantoin deriv. and microorganism capable of hydrolysis and aving the hydantoin ring

KANEGAFUCHI CHEM KK 04.02.76-JA-011575

*B05 (17.11.80) *J53044-690 +C12p-13/04 C12r-01/**

odn. of D-N-carbamylphenylglycine or its substd.deriv. formula (II) comprises treating 5-phenylhydantoin (in- ding DL-, D-, and L-isomers) or its substd.derivs. of mula (I): with a culture broth, organism (live or dried) or its worked-up material (ground or extracted) of microorganism which is able to hydrolyse and ave asymmetrically the hydantoin ring (where R is H OH).



Specifically the microorganism is Pseudomonas, Xanth- onas, Achromobacter, Alcaligenes, Acetobacter, Cory- bacterium, Brevibacterium, Microbacterium, Arthro- cter, Agrobacterium, Aerobacter Enterobacter, Kleb- lla, Escherichia, Erwinia, Serratia, Proteus, Baccill- Micrococcus, Sarcina, Protaminobacter, Mycobacter m, Nocardia, Streptomyces, Actinomyces, Aspergillus nicllium, Candida, Rhodotorula, Torulopsis, Pichia or ecilomyces.

(II) are useful as intermediates to optically active phen glycine and p-hydroxyphenylglycine used in preparation semi-synthetic penicillin or cephalosporin. 4.2.76 as 1575, C12p-13/04, C12r-1/01 (17.11.80) KANEGAFUCHI EM. KK (10pp) (J53044690)

DW ★ D16 89358 C/50 ★J8 0045-196

dn of 3-(3,4-di:hydroxy phenyl)-L-N-acyl alanine (L-N-acyl PA) - by culturing penicillium (sp) to produce arabo:ascorbic acid adding n-acyl:tyrosine before recovery

KYOWA HAKKO KOGYO KK 08.06.70-JA-048750

B05 (17.11.80) C12p-13/22

microorganism of the genus Penicillium capable of pro- ing araboascorbic acid is cultured in a medium contg. assimilable carbon source, whereby araboascorbic acid produced in the culture medium. N-acyltyrosine is add- to the medium to produce L-N-acyl DOPA (3-(3, 4-di- lroxyphenyl)-L-N-acyl alanine) which is then recovered this method, L-N-acyl DOPA can be obtd. in high yield The microorganisms used in this method include Peni- lium chrysogenum ATCC 10107, Penicillium notatum CC 11625, Penicillium decumbens ATCC 10436, Peni- lium citrinum ATCC 9849 and Penicillium claviforme CC 10426. Glucose is used as the assimilable carbon rce. The culture medium also contains phosphate, sul- te, carbonate, nitrate, and other salts and Mg, Mn, Zn, Ca and other metals, culturing is done at pH 3-7 at 40°C under aerobic conditions.

When prodn. of araboascorbic acid reaches a maximum acyl tyrosine is added to the medium and cultivation is ducted for a further 4-24 hrs. under strong aerobic con tions at neutral pH. After the reaction is over, the pH adjusted to be acidic, and the culture is centrifuged. e supernatant is passed through a Cephadex column, and column is eluted with phosphate buffer, followed by cn. and cooling. Crystals of L-N-acyl DOPA are obtd. .70 as 048750, C12p-13/22 (17.11.80) KYOWA FERMEN ATION KK (3pp22)

KIRI D16 57811 W/35 =J8 0045-197

Adenosine triphosphate prodn. - from adenine or 5'-adenylic acid using yeast

KIRIN BREWERY KK 18.08.73-JA-092764

*B02 (17.11.80) *J50042-093 +C12p-19/32 C12r-01/86*

ATP was produced from adenine or 5'-adenylic acid using a prefrozen and defrosted yeast. Thus 350g pressed brew- er's yeast was frozen in Et_2O cooled with dry ice and de- frosted overnight in a cold room. A mixt. (720 ml) of the treated yeast, 240 ml of 1 M phosphate buffer (pH 7.0) glucose 21.6, and adenosine 2.9g was reacted at 37° for 2 hrs. the reaction was stopped by boiling for 5 mins. ATP in the supernatant, was sepd. and purified by an active C, ion exchange column chromatography, and the Me_2CO treat -ment to give 4.5g ATP-Na_2 with 99-100% purity. 18.8.73 as 092764, C12p-19/32, C12r-1/865 (7.11.80) KIRIN BEER KK (3pp) (J50042093)

AJIN D16 82151 W/50 =J8 0045-198

Guanosine microbial prodn - glutamate added to medium after cell no. reaches half of max

AJINOMOTO KK 22.09.73-JA-106489

*B02 (17.11.80) *J50053-595 +C12p-19/40 C12r-01/07*

Guanosine (I) was produced by aerobic culture of a bacter- ium adding > 0.25 g/l glutamate to the medium after the cell no. reached to half of the max. In an example, Bacillus subtilis P-2115 was aerobically cultured at 34° for 72 hr. on a medium (pH 7.0) contg. glucose 8, L-glutamic acid 0.7, RNA 0.1, NH_4NO_3 0.5, and $MnSO_45H_2O$ 0.001 g/dl. plus soybean protein hydrolysate 3.3 ml/dl. After 24 hr. cultiv- ation, Na glutamate was added 4 times to the broth each 0.13 g/dl every 6 hr. Prodn. of I was 1.09 g/dl. 22.9.73 as 106489 C12p-19/40, C12r-1/07 (17.11.80) AJINOMOTO KK (2pp) (J50053595)

AJIN D16 78094 Y/44 =J8 0045-200

Xanthosine microbiological prodn. - by culturing Bacillus subtilis strain resistant to sulpha drugs in adenine-contg. medium

AJINOMOTO KK 30.03.74-JA-036372

*B02 (17.11.80) *J50126-887 +C12p-19/40 C12r-01/07*

Xanthosine is produced by culturing Bacillus which are resistant to sulpha drugs and require adenine. In an exam- ple, B.subtilis AJ 3725 grown in an adenine-contg. seed culture was incubated aerobically at 34° for 72 hrs. in a main culture medium contg. glucose 8.0, NH_4NO_3 1.5, KH_2PO_4 0.02, $MgSO_4$ 0.04% Fe^{2+} and Mn^{2+} 2 ppm each RNA 0.12% soybean protein hydrolysate 4 ml/dl, and $CaCO_3$ 3 g/dl (pH 7.5). The culture medium was filtered, the filt -rate contained 13g xanthosine l. 30.3.74 as 036372, C12p 19/40, C12r-1/07 (17.11.80) AJINOMOTO KK (3pp) (J50126887)

ASAH D16 76243 W/46 =J8 0045-254

Polyphenols and diketones removal from fermentation products - by treatment with tert-amino derivs. of cellulose, amino acids of proteins

ASAHI CHEMICAL IND KK 21.05.73-JA-055534

*A11 B04 (17.11.80) *J50005-284 +B01d-15 B01j-20/24 C12h- 01/02*

Polyphenols and diketones contaminating alcohol beverages drugs, and foods produced by fermentation are readily re- moved by treating with cpds. produced from tert. -amino derivs. of cellulose and amino acids or proteins.

In an example, 10g tert-aminocellulose was suspended in 160 ml. H_2O and to this was added 20g arginine. The mixt. was stirred at room temp. for 3 hrs. and filtered. The residue was washed and dried. The prodt. was added to a soln. of catechin and resorcinol (1000 ppm each), the pH was adjusted to 5.3, the soln. was stirred for 1 min. and filtered. The filtrate contained catechin 10 and resor- cinol 23.1 ppm. 21.5.73 as 055534, B01j-20/24, B01d-15/00 C12h-1/02 (17.11.80) ASAHI CHEM. IND. KK (3pp) (J50005284)

MEIJ ★ D16 89388 C/50 ★J8 0045-524
Cultivation of edible mushrooms using wood powder - with methyl-1-(butylcarbamoyl)-2-benzimidazole carbamate used to eliminate Trichoderma microorganism
MEIJI SEIKA KAISHA (DUPO) 05.06.72-JA-055100
E13 (18.11.80) A01n-47/18
In cultivation of edible mushroom with the use of wood powder, methyl-1-(butylcarbamoyl)-2-benzimidazole carbamate is used as agent for elimination of microorganism of Trichoderma. 5.6.72 as 055100 A01n-47/18 (18.11.80) MEIJI SEIKA KAISHA (5pp22) (J49018640)

TAGU/ D16 74579 B/41 =J8 0045-529
Mass culture of virus - by inoculating virus into variant cell strain HEL R 66, and culturing
TAGUCHI F 24.02.78-JA-019722
*B04 C03 (18.11.80) *J54113-421 A61k-39/12 +C12n-07 C12r-01/91*
Process comprises inoculating virus into variant cell strain HEL-R 66 and culturing. Process is suitable for mass prodn. of a virus that is used as material of vaccine or antigen for diagnosis. Variant cell strain HEL-R 66 was isolated from cell originated from human embryo tissue by repeating variation and sepg. operation in an elapse of long time. HEL-R 66 has specific characteristics such as non-productibility of interference, wide sensible zone to virus, high sensibility to virus, possibility of non-limitative successive transfer culture, low serum demand and no formation of tumour onto nude mouse (sic).

Viruses that propagate in variant cell strain HEL-R66 include rabies virus, encephalitis japonica virus, monkey C type of virus, BK virus, SV_{40}, polyoma virus, vaccinia virus herpes, measles virus, Western Equine encephalitis syndolvis virus, Newcastle disease virus, polyvirus, Echovirus, Coxsackeevirus, Reovirus, Sendai virus and Rubella virus etc. 24.2.78 as 019722, A61k-39/12, C12n-7/00, C12r-1/91 (18.11.80) TAGUCHI F (5pp69)(J54113421)

ANTI- ★ D16 C/50 ★RU --64-795
1-Lysine prepn. by fermentation - using Brevibacterium lactofermentum ICCF-3 on specified medium
INTR ANTIBIOTICE (INSC) 01.03.76-RU-084961
B05 E16 (25.07.79) C12d-13/06

ALUP/ ★ D16 C/50 ★RU --67-040
Rifamycin B and SV prepn. - by submerged cultivation of DZI-323 and DZZ-505 mutants
ALUPEI G 06.09.75-RU-090377
B02 (28.07.79) C12d-09/16

ANTI- ★ D16 C/50 ★RU --67-041
ICCF-DZ-323 Nocardia mutant - obtained from know Nocardia species and producing rifamycin SV
INT ANTIBIOTICE (INSC) 06.09.75-RU-090886
B04 (29.07.79) C12k-01/02

FORE- ★ D16 C/50 ★RU --67-490
Resinous bark conversion into compost - by adjusting tannin(s) content and fermentation
INTR FOREST TRANSP 28.09.77-RU-091687
(15.07.79) C05f-11/02

VERI- ★ D16 C/50 ★RU --67-561
Rapid blood cholinesterase detector - has three compartments for practical sampling using standard reagents
STAT VERIF INTRETIN 16.08.75-RU-083177
B04 J04 P31 (15.04.79) A61b-19/02

ICIL D16 82986 Y/47 =SU -730-274
Aureolic acid type cpds. used as animal growth promoters - and microbiological prodn. of mithramycins
IMPERIAL CHEM INDS LTD 19.05.76-GB-020675
*B04 C03 +P32 (28.04.80) *BE-854-821 A23k-01/17*
Method of increasing the wt gain of fat stock and improving feed utilisation efficiency comprises orally administering a cpd(I) of the aureolic acid gp to the animals. Also claimed is a process for producing a mixt of mithramycins(Ia) by culturing a (Ia) producing strain of streptomyces pilosus (esp NCIB 11278) under aerobic conditions at 15-45°C in a medium contg assimilable C and N sources, filtering th culture and isolating the acid fraction of the filtrate.

(I) give greater wt gains and better feed utilisation th penicillin or nitrovin. Suitable (I) include aureolic acid, mithramycins, aburamycins, chromomycins, olivomycins and variamycin. The pref. cpds are the Na or Mg salts chelates or complexes of (Ia) or mithramycin A. The cp are pref. added to a normal balanced animal feed in an amt of 0.0001-0.005 wt. % pref in the form of a concentrate contg. 0.005-50 wt. %(I).
Davis, D. H., Arnill, R. D., Norris, G. L. F., Bul. 15/25.4.19.5.77. as482806(8pp).

ASTR D16 23071 U/17 =SU -730-2
Injectable iron prepns - contg iron complexed with polymer hydroxycarboxylic acid, polyol and halohydrin and/or epoxide
ASTRA AB 06.10.71-SW-012614 (06.10.71-SW-012613)
*A96 B04 C03 (D25) (28.04.80) *DT2247-021 A61k-27 C08g-30*
Iron prepns in dry form or as aq injectable solns;for treating iron deficiency comprise a complex of Fe and a water-swellable polymer of (a)≥1 of arabonic, gluconic and glucoheptonic acid and/or their salts and/or lactones (b)≥1 of glycerol, polyglycerol, tetritol, pentitol, hexitol and hepitol and/or their derivs partially esterified with 1 5C alkyl and/or hydroxyalkyl gps and(c)≥1 dihalohydrin, epihalohydrin and/or derived diepoxide. The dry prepns pref contain 5-40 esp 20-35 wt % Fe, and the aq solns pref. contain 5-100, esp ca 50 mg Fe/ml. The prepns ar pref prepd by reacting a water-soluble FeIII cpd with a polymer in aq soln the pH being adjusted so that it is 10-14 and the end of the reaction, pptg the prod pref with Et OH and opt purifying by repeated repptn, drying and opt. dissolving in H_2O. The polymers themselves can also be used as viscosity regulators for foods, pharmaceuticals, herbicides and detergents, as blood plasma substitutes, enzyme carriers, soil improvers, liquid cements or glue plastics inters., pptn and flocculating agents in beer prodn. electrolyte additives, detoxicating agents and X-ray contrast agents(as Ba complex).
Dalberg, A. G., Hebert, K-G., Lindwall, S., et al Bul. 15/25.4.80.3.10.72. as833676(4pp).

KURE D16 70692 Y/40 =SU -730-27
Antitumour nitrogen contg. polysaccharides prodn. - fro Basidiomycetes, by extraction with aq. base then purification b e.g. reverse osmosis
KUREHA CHEM IND KK 07.07.76-JA-080664
*B04 (28.04.80) *BE-852-987 A61k-35/66*
Improved prepn of N-contg polysaccharides(I) comprises first extracting a culture of B asidiomycetes with aq. 0.01-2N alkali then purifying the extract of ultrafiltration and/or reverse osmosis to remove cpds of mol wt.< 5000

Pref. the fruiting bodies and/or mycellium of Coriolus versicolor(Fr)Quelet is extracted using 5-200% by wt. of av. alkali based on the starting material.

(I) have antitumour activity e.g. when given intraperitoneally or orally to mice with sarcoma 180 and prevent secondary reactions during chemotherapy of cancer or loss of immunity and physical resistance in surgical cases They also improve heptatic function, stimulate the appeti counteract digestive disorders, are diuretics and can be used to treat leprosy. Yields are high and the process simple.
Ueno, S., Yoshikumi, C., Hiroso, F., et al Bul. 15/25.4.80. 20.4.77. as472207(3pp).

KALU ★ D16 89661 C/50 ★SU -730-69
Nuclease enzyme immobilised on soluble carrier - is obtd. b covalent bonding of active nuclease to meta-amino-benzyloxy methyl-dextran carrier
KAZAN LENIN UNIV 19.01.76-SU-314787
A96 B04 (02.05.80) C07g-07/02
Immobilised nuclease enzymes are useful as medicinals in enzymic therapy and in microbiological synthesis utilising semipermeable membranes for the sepn of enzyme and substrate reaction prods.

Nuclease which retains its biological activity in injection form after phyllogenetic sepn from animal tissue unit is immobilised on soluble carrier by covalent bonding of

nzyme and carrier.

Pref carrier is meta-amino-benzyloxy-methyl-dextran aving mol wt 40000-60000. Typically ribonuclease im-obilised on m-amino-benzyloxy-methyl-dextran has igher antiviral activity than free enzyme.

urinenko, B. M., Cherepneva, I. E., Alekseeva, I. I., ul.16/30.4.80.19.1.76.as314787(5pp938).

IICA D16 34956 C/20 =US 4235-043

ultivation of algae - in light devoid of short-wavelength omponents

NIPPON CARBIDE KOGY KK 28.10.78-JA-132116

*A97 E13 P13 (D13) (25.11.80) *DT2910-014 +A01g-07*

lga is cultivated in a light field free from light of wavelen gth > 340, pref. > 360mm. Pref. the cultivation is carried ut by passing the light field through a covering material hich permits the transmission of light of wavelength > 50mm and inhibits the transmission of light of wavelength > 380.

Pref. the alga belongs to Division Cyanophyta, Rhodo-hyta, Chrysophyta, Phaeophyta or Chlorophyta. Pref. ght source is sunlight or artificial light. The process giv es algae of improved quality in increased yields. Typical overing material is a plastic film or plate with a coating f UV absorber. 14. 3. 79 as 020507(25pp924)

EDI- ★ D16 89847 C/50 ★US 4235-244

icrobiological sampling device - sealed with plug of body fluid oluble material during insertion into patient

MEDI-TECH INC 27.07.78-US-928702

A96 B04 P31 (25.11.80) A61b-10

microbial specimen sampling device comprises a cathe-r having a collector within its distal end. This end is aled against contamination when it is introduced into a tient, by a removable plug of a water-soluble biocompat-le material. The plug is preferably polyethylene glycol aterial and has a weight of 5-100mg. Preferably the plug ll dissolve in the body in less than 10 mins at body temp-ature. The outer diameter of the catheter is preferably ss than 1.8mm.

The sampling device is used to obtain uncontaminated cteriological specimens particularly from the lower res-ratory tract. The plug can be disposed of safely within e body. 27. 7. 78 as 928702(6pp295)

JVR D16 14543 B/08 =US 4235-687

zymatic membrane micro:titration cell partic. for urine etc. - imps membrane between ferromagnetic ring and magnetic core end of electrode

AGENCE NAT VALORISATION 20.05.77-FR-015615

*A89 J04 S03 (S05) (25.11.80) *FR2391-467 G01n-27/30 +C12q-01*

measuring cell for assays using membranes, e.g. of ological fluid components, has a cavity formed in a body define a cylindrical space with its bottom over a part of diameter extended by a second space forming a measu ing chamber of conical, frustoconical or hemispherical ape.

A measuring electrode terminated by a magnetic torus located in the first space and there is a holder for the rus. A circular nonmagnetic membrane is cut out to des red size within the cavity adjacent the torus and between rus and facing cavity surface. Ducts for sample and/or her liquids pass through the body bottom into the measur ng space. The block is pref. of stainless steel, polymeth lmethacrylate or polyethylmethacrylate, and the memb-ne is enzymatic. 16. 5. 78 as 906891(5pp1358)

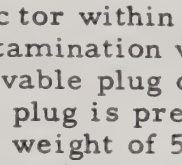
BI ★ D16 89954 C/50 ★US 4235-772

owth promoting cystine or cysteine contg. polypeptide(s) - for aling wounds and burns and stimulating tissue cultures in vaccine d interferon prodn.

KABI AB 21.06.78-SW-007114

B04 (25.11.80) C07c-103/52 C12n-05

lypeptides of the formula (I) and their acid addn. salts d livear amalogues are new:-(where P is H or -Phe-Asn



-Val-Asp-Lys-Lys; Q is -Gln or -Ser-Tyr-Tyr-Gln-Ser-Asn-or-Tyr-Thr-Ala-Glu-; R is-Thr-or-Lys-Pro-Gln-Val-Thr-or - Asp-Glu-Leu-) and the corres-ponding peptide in which its reactive groups are protect-ed in any of Asp, Cys, Glu, Lys, Ser, Thr, Tyr).

Specifically claimed are Boc-Phe-Asn-Val-Asp(OBzl)-hys(ε-2BrZ)-Lys(ε-2BrZ)-Cys(Acm)-Gln-Cys(Acm)-Asp (OBzl)-Glu(OBzl)-Leu. Boc-Cys(4-meOBzl)-Ser(Bzl)-Tyr-(2BrZ)-Tyr(2Brz)-Gln-Ser(Bzl)-Asn-Cys(4-MeOBzl)-Thr-(Bzl);Cys(Acm)-Tyr-Thr-Ala-Glu, Cys(Acm)hus-Pro-Gln-Val;Ph-Asn-Val-Asp-hys-Cys-(Acm)-Gln-Cys(Acm)-Asp-Glu-Leu; Cus-Ser-Tyr-Tyr-Gln-Ser-Asn-Cys-Thr, Cys-Tyr-Thr-Ala-Glu-Cys-Hus-Pro-Gln-Val-Thr, Phe-Asn-Val-Asp-hys-Lys-Cip-Gln-Cys-Asp-Glu-Leu. Acm is acetamidomethyl, Z is benzyloxyceobonyl, Bzl is benzyl. 20. 6. 79 as 050962(8pp916)

RESE ★ D16 90000 C/50 ★US 4235-864

Immunoassay for detection of cocaine metabolite in sample - by using reaction with anti-benzoyl-ecgonine serum from animal

RESEARCH CORP 10.04.78-US-895020 (21.01.77-US-761078)

B04 K08 S03 (S05) (25.11.80) A61k-39 A61k-43 G01n-33/16

Immunoassay for the detection of a cocaine metabolite in a biological tissue or fluid involves combination with an anti-benzoylecgonine serum(obtd. by immunising an animal by injecting an antigenic conjugate of ecgonine or its acetate and a peptide, protein an polysaccharide, and then eliciting serum from the animal). The resulting complex is deter-minable by an assay, esp. a radioimmunoassay.

The procedure is highly accurate and efficient for deter mn: of the cocaine metabolite benzoylecgonine in organs and body fluids in the detection of drug abuse etc. The anti-benzoylecgonine serum is more specific to benzyoylecgon-ine thantot ecgonine or other cocaine metabolites. Use of the serum is described in U.S. 4207307(der. 45012C)10. 4. 78 as 895020 Div. ex 4207307(19pp1248)

JOHO D16 63503 B/35 =US 4235-868

Osmium and ruthenium amine nitride complex salts - are cell staining reagents in electron microscopy

JOHNSON MATTHEY LTD (JOHM) 23.05.78-GB-021358 (13.02.78-GB-005624)

*B04 E31 J04 (S03) (25.11.80) *GB2014-553 G01n-01/30*

Staining of cells of a prepd. biological specimen comprises mild acid hydrolysing the specimen and then reacting it with staining reagent comprising aq. soln. of nitrids. - bridged complex of Or or Ru of formula $M_2^{IV}N(NH_3)_8{}_{2x}X_5$-$y(H_2O)x$ 7Y (where M is Os or Ru; X and Y are independently nitrate, halide or pseudohalide; x is 0 or 1 and y 2 or 3).

Specifically the complex has the formula $[Os_2N(NH_3)_8X_2]Y_3$, $Ru_2N(NH_3)_8X_2$ Y_3 or $Ru_2N(NH_3)_6X_3(H_2O)$ Y_2. Method is suitable for the detection, e.g. of DNA and polysaccha-rides by electron microscopy. 12. 2. 79 as 011666(5pp393)

SMIK D16 77499 Y/44 =US 4235-876

Fowl pest vaccine - derived from Newcastle disease virus strain P-77-8

SMITHKLINE-RIT (RECA) 25.04.77-BE-853923

*B04 C03 (25.11.80) *BE-853-923 A61k-39/12 C12k-07 +A61k-09/12*

Improved vaccine against Newcastle disease and administ-rable in the form of an aerosol comprises a dose of New-castle disease virus P/77/8 strain and suitable pharmaceu tical diluent. For a rehydratable freeze-dried form of the above, the vaccine is pref. supplemented with a stabiliser.

Prepn. of an aerosol-administerable vaccine against Newcastle disease comprises passaging P/76/5 NDV strain twice on chicken embryo fibroplasts at 41°C, harvesting and preparing the aerosol form by known techniques. 24. 4. 78 as 899424(4pp963)

MERI ★ D16 90005 C/50 ★US 4235-877
liposome contg. viral or bacterial sub-unit antigen - complexed with a quat. ammonium surfactant
MERCK & CO INC 27.06.79-US-052379 (26.03.79-US-024444)
B04 (25.11.80) A61k-39/02

A particle consists of (a) a liposome;(b) a quat. ammonium salt of formulae $R_1R_2R_3R_4N^+ X^-$ or $R_1\text{-}\overset{+}{N}\langle^{R_5}_{R_6}\rangle X^-$

R_1= 12-20C alkyl. R_2 and R_3 = 1-3C alkyl. R_4= benzyl. R_5 and R_6 complete a 5- or 6-membered heterocycle X is halide ion, pref. Cl or Br) and (c) a viral or bacterial subunit antigen (Ag) reacted so as to form a complex.

Pref. (a) is derived from a phosphatidylcholine-contg. lipid. and Ag is derived from influenza virus, hepatitis B virus, Neisseria gonorrhoeae, or Meningococcus polysaccharide type A or C.

These particles are antigenically more active thane free Ag. 27.6.79 as 052379(3pp1251)

BEEC D16 67721 W/41 =US 4235-882
Beta-lactamase inhibitor MM 4550 - isolated from product of Streptomyces culture, for use in antibacterial medicaments
BEECHAM GROUP LTD 28.03.74-GB-013855
*B04 (25.11.80) *DT2513-855 A61k-35*

Pharmaceutical compsn. for treating bacterial infections comprises a dibasic salt of MM 4550A which is ⩾ 70% pure. MM 4550A (I) is a solid carboxylic acid of mol. formula $C_{13}H_{16}O_9N_2S_2$. (I), describedwith reference to its Na salt, has antibacterial activity against various species including Staphylococcus aureus, Bacillus Subtilis, Escherichia coli Klebsiella aerogenes, Proteus mirabilis, Acinetobacter anitratus, Seratia marcescens and shigella sonnei; it also synergises the antibacterial activity of ampiaillin against certain β-lactamase producing bacteria.

MM 4550A is produced from Streptomyces olivaceus ATCC 31126, and is a small purified component of the isolated culture prod. 20.9.76a s 724948(+19.3.75, 1.6.76-US-559973, 691491)(17pp963)

MEIJ D16 35651 B/19 =US 4235-883
Antibiotic BN-213 with antibacterial activity - obtd. by culturing Pseudomonas strain and active against Gram-positive bacteria
MEIJI SEIKA KAISHA 31.10.77-JA-129700
*B04 (25.11.80) *DT2846-320 +A61k-35*

Novel antibiotic BN-213, effective for inhibiting the growth of gram-positive bacteria, is prepd. by cultivating Pseudomonas sp. BN-213, ATCC No 31421 in a medium contg. C and N sources and, if required, inorganic salts and anti-foaming agent, at pH 2 and 20-35°C. The antibiotic is pref extracted from the filtrate with ethyl acetate and purified by using a suitable combination of silica gel, alumina and gel-filtration material.

The antibiotic has low toxicity. 12.10.78 as 950822(6pp)

KORB- ★ D16 90026 C/50 ★US 4235-940
Riddling wines fermented in bottles - by combined tilting and vibrating actions on inverted bottles
KORBEL F & BROS 27.03.78-US-890305
(25.11.80) C12g-02

Bottled wine, packed in compartmented cases with individual compartments for each bottle separated by dividers, is riddled. The cases are inverted to allow the solids to settle to the necks of the bottles. The cases are tilted from side to side to jostle the bottles. The cases are also vibrated to cause the solids in the wine to settle in the lower end of the neck of each of the bottles.

The method is used to riddle fine wines fermented in bottles such as campagne.The method is much less labour intensive than previously used methods. 27.3.78 as 890305 (11pp295)

MEDI- ★ D16 90034 C/50 ★US 4235-960
Competitive enzyme linked immunoassay - for determn. of soluble immunogens and haptens
MEDICAL COLL WISCON 29.07.77-US-820286
B04 J04 S03 (S05) (25.11.80) G01n-31/14

Competitive enzyme-linked immunoassay for a soluble im-unogen or hapten analyte in a sample soln. involves first providing an insoluble solid immunosorbent to whcih analyte has been linked, then carrying out a competitive reaction between analyte in the sample and the linked analyte for a selected amt. of first antibody; then coupling a hetero-logous bridging second antibody to any first antibody lin-ed to analyte on the solid immunosorbent, the bridging second antibody being directed against the first antibody.

Next coupling a soluble antibody-enzyme immune complex to any bridging second antibody coupled to first antibody linked to analyte on the immunosorbent, the antibody of the complex being of the same species as the first antibody or a cross-reactive species; and then measuring the activity of the enzyme coupled to the immunosorbent.

The analyte concn. is inversely proportional to the enzymatic activity coupled to immunosorbent. The assay is competative and does not depend on covalent coupling of analyte or antibody to enzyme, it is sensitive and applicable to high and low mol. wt. analytes. 29.7.77 as 820286 (9pp1248)

LKBP D16 03721 C/03 =US 4235-961
Creatine kinase sub-unit M determn. by emission photometry - after reaction with luciferase and D-luciferine in the presence of L-luciferine and creatine kinase M antibody
LKB PRODUKTER AB 29.06.78-DT-828658
*B04 S03 S05 (25.11.80) *DT2828-658 +C12q-01/66*

The subunit B of creatine kinase (CK-B) is determined photometrically in buffered water soln. through reaction with creatine phosphate, ADP and the system luciferase/D-Luciferin, in the presence of a specific antibody inhibiting the subunit M of creatine kinase. Determn. is mad in the presence of D-Luciferin analogue has a structure similar to D-Luciferin and being a competitive inhibitor of the firefly luciferase reaction.

Pref. the reaction is at pH 6.5-7.8 using ADP concn. o 10^{-5}-$5x10^{-3}$M and buffer concn. of 10-250mM. Method does not suffer from the lag phase and sensitivity is increased compared with prior art. 21.6.79 as 050518(5pp964)

DOWC ★ D16 90035 C/50 ★US 4235-962
Diagnosis of liver disorders by measuring transaminase in body fluids - with reagent contg. 2-oxo-glutarate, NADH, malate dehydrogenase, lactate dehydrogenase and aspartate or alanine
DOW CHEMICAL CO 21.08.78-US-935425
B04 J04 (25.11.80) C12q-01/52

Reagent kit for determining transaminase in body fluids comprises the following reagents:- Reagent (I): aspartate(Ia) Reagent (II): alanine (IIa), Reagent (III): 2-oxoglutarate (IIIa NADH(IIIb), malate dehydrogenase (IIIc) and lactate dehydrogenase (IIId) and opt. pyridoxal phosphate (IIIe)

When (I) is mixed with (III) the product contains ⩾35m mol. (Ia), 0.2-35 m. mol (IIIa), 0.5-5m mol (IIIb), ⩾175 units/l (IIId) and ⩾1 40 units/l (IIIc). When (II) is mixed with (III) the product contains ⩾130m mol. (IIa), and the same concentrations of (IIIa) to (IIId) as when (I) is mixed with (III).

Used for diagnosis of liver disorders. A mixture of (I) and (III) is used to assay aspartate 2-oxoglutarate aminotransferase and a mixture of (II) and (III) to determine alanine/2-oxoglutarate aminotransferase. (IIIe) is added to convert the inactive transaminase into its active form. 21.8.78 as 935425(7pp916)

HANS/ ★ D16 90036 C/50 ★US 4235-963
Disposable appts. for sampling and identifying microorganisms - with troughs holding testing media secured to housing through which streaker pad is drawn
HANSEN J C 11.05.79-US-038273
(25.11.80) C12q-01/24

Appts. for sampling and identifying microorganisms comprises a housing with an internal elongate cavity which has an opening through the entire length of the wall of the housing. A streaker strip has an innoculating pad on one end and is slidable within the cavity. The pad projects beyond the end wall of the housing.

An identification bar has a trough formed in one surface is secured to the housing opening. The innoculating pad drawn over the trough as the streaker strip is drawn ough the housing.
The appts. is partic. used for sampling and identifying hogenic microorganisms from the throat of a patient.
5.79 as 038273(7pp295)

CH/ ★ D16 90037 C/50 ★US 4235-964
ntification of anaerobic microorganism - by contact with solution taining oxidation reduction indicator and biodegradable test strate
BOCHNER B R 28.09.78-US-946884 (03.03.77-US-773879)
(25.11.80) C12q-01/04

microorganism is identified by preparing a suspension a culture of it in a nutrient solution to a culture density $2x10^8$cells/ml. The suspension is brought into contact h an aq. soln. contg. an oxidation-reduction indicator ich undergoes an irreversable colour change on reduct-. The suspension is also contacted with a bio-degradab-test substrate compound which when catabolized by a croorganism will cause reduction of the indicator.
The concn. of the nutrient in the suspension is insuffic-t to cause reduction of the indicator when the suspension ntacts the solution. Ths suspension contains a cpd. which duces O_2 but which does not reduce the indicator. It is sent in a sufficient amt. to reduce all the O_2. A buffer used to maintain the pH between 4.5-8.
The method is used for taxonomic classification, genetic alysis or investigating the physiology of catabolism.
9.78 as 946884(10pp295)

TL D16 09629 C/06 =US 4235-966
crobiological prodn. of alginate polysaccharide(s) - by culture of n-pathogenic, antibiotic tolerant, Pseudomonas spp
TALRES DEV NA NV 07.02.79-GB-004215 (06.06.78-GB-026413)
*A11 B04 C03 (D16) (25.11.80) *EP---7-690 C12p-19/04*

odn. of polysaccharide consisting of a partially acetylat variable block copolymer of D-mannuronic and L-gul-onic acid residues comprises cultivating a strain of Pse-domonas which is non-pathogenic to humans, and which s been obtd. by treating a non-mucoid species of Pseu-monas, which is nonpathogenic to humans, with a β-lac-m or aminoglyeoside antibiotic . A mucoid strain toler-t to the antibiotic is used.
The antibiotic is e.g. a penicillin, esp. a semisynthet-penicillin such as a carboxy(ar) alkyl deriv., pref. car enicillin. The Pseudomas species is partic. P mendoci a P. tabaci or P. putida. The process can give good yiel s. The prods. are useful as emulsifiers, thickeners and bilisers in the food, pharmaceutical, textile and paper ustries and in agriculture. 6.6.79 as 046153(3pp945)

RP D16 10283 A/06 =US 4235-970
ctivating the protease in alpha-amylase - by heating in presence rotective material e.g. corn syrup
CPC INTERNATIONAL INC 05.08.76-US-712103
*D17) (25.11.80) *BE-857-502 +C12n-09/28*

ective inactivation of proteolytic enzyme impurities in a tericidal α-amylase enzyme prepn. derived from Bacil s licheniformis is described. Method comprises adding er Ca salt to provide total Ca concn. of 0.5-1.5% on a basic; heating the resulting mixt. to 70-90°C; and ma-ining this temp. until the proteolytic enzyme is inactiv ed.
Pref. the prepn. has a pH 5-8 and the heating period 0.5-3 hours. At least part of the required Ca may be ginally present in the prepn. The α-amylase activity of prepn. is not reduced. The prod. is used to digest or efy starch in the prodn. of sweeteners. 5.8.76 as 103(11pp945)

NA- ★ D16 90040 C/50 ★US 4235-971
omated inoculator appts. - in which multiple pin inoculator head pped into sample tray then lowered into test tray
DYNATECH LABS INC 09.06.78-US-914131 (26.04.76-US-680450)
25.11.80) C12m-01/32

A sample is held in a reservoir tray beneath an inoculation head which carries depending pins. The pins are dipped in -to the sample and moved by a carriage to overlie wells in a depositing test tray. The head is again lowered to inoculate the test tray.
Finally the head is moved to a sterilisation station which includes a heated chamber into which the pins are lowered. Pref. the horizontal movement of the head betwe-en the stations is faster than the vertical reciprocation of the head at each station. Pref. . the number and position of the pins are the same as that of the wells in the test tray.
Typically there are 96 wells in the test tray contg. different concs. of an antibiotic and the appts. is used to determine the concs. to which a sample organism is susceptible. 9.6.78 as 914131(8pp295)

BADI D16 15090 C/09 =US 4235-973
Prodn. of carriers for immobilising proteins, esp. enzymes - by reacting sulphochlorinated styrene resin with di:amine and then with coupling agent
BASF AG 07.08.78-DT-834539
*A96 B04 (25.11.80) *EP---8-100 +C08j-09*

In the prepn. of a microporous polymeric carrier for cova-lently binding active proteins via(thio)isocyanate or alde-hyde gps, the sulphonic acid chloride gps. of a sulphochlor-inated macroporous styrene resin contg. 1-4.5 mequiv. sulphonic acid chloride gps. and consisting of 50-97 wt.% styrene, 3-50 wt.% divinyl benzene, opt. 1-25 wt.% ethyl-vinyl benzene and opt. 1-10 wt.% other monomer are react-ed with an α,w-diamino cpd. $H_2N-(CH_2)n-NH_2$., where n is 2 to 12 hydrazine, or an α,du-diaminodiether of formula $H_2N-(CH_2)_3-O-X-O-(CH_2)_3-NH_2$, where X is $(CH_2)n$ in which n is 2-6, or X is 2,2-dimethyl-1,3 propylene or 3-methyl-1,5-pentylene.
Any remaining sulphonic acid chloride gps. are hydrol-ysed to the free sulphonic acid or saponified to its Na salt or reacted with a prim. or sec. amine to give sulphona-mide gps. The terminal amino gps. introduced in the first stage, are then treated with (thio)phosgene, a (cyclo)aliph-atic or aromatic diisocyanate or an aliphatic dialdehyde of formula $OCH-(CH_2)n-CHO$ where n is 1-8.
Biologically active substances can be covalently bound to the carrier without impairing their activity to give a sta-ble prod. which, by virtue of its hydrodynamic properties is suitable for use in a column or similar reactor.
12.7 79 as 057010(6pp945)

MERI ★ D16 90051 C/50 ★US 4235-994
Antigen meningococcal polysaccharide - useful for immunisation of infants against meningococcal meningitis
MERCK & CO INC 26.06.78-US-919359 (01.08.77-US-820665)
B04 (25.11.80) C08b-37

Antigen meningococcal polysaccharide (I) active against Gp. C meningococci, with 80% (I) by wt. having mol. wt. 10^6 daltons, is new.
(I) is used in the immunisation esp. of infants against Gp. C meningococcal meningitis caused by Neisseria men-ingitides strains. 26.6.78 as 919359 Div. ex. 4123520(4pp)

PFIZ D16 36923 C/21 =US 4236-211
Determn. of Minimum Inhibitory Concn. of antimicrobials - by accurate, rapid and economical measurement system
PFIZER INC 15.09.78-US-942683
*B04 S03 T01 (25.11.80) *EP--10-846 C12q-01/18 +G01n-21 G06f-15/20*

Determn. of m.ic. of a given antimicrobic agent (I) w.r.t. a sampled microorganism (II) comprises (a) distributing a part of the sampled microorganism to a bacteria growth medium in 2 separate chamber, (b) distributing a 1st concn. of (I) to one of the chambers and a 2nd different concn. of (I) to the 2nd chamber, (c) detecting the crits. of (II) growth in the chambers after a predetermined incubat-ion period by measuring the respective numerical concns. of (II) residing the chambers as compared to growth ina control chamber having no (I) in it, and (d) determining the m.i.c. as a predetermined function of at least the 1st and 2nd. Measured values of (II) growths.
Method is rapid, economical and convenient. 15.9.78 as

942683(52pp393)

MASI ★ D16 90091 C/50 ★WP 8002-296
Detecting cancer by assaying galactosyl transferase - with a marker having specific affinity for galactose
MASSACHUSETTS INST TECH 16.04.79-US-030182
B04 (30.10.80) C12q-01/54
D/S: N (AU, BR, JA, NO) + E(CF, CH, DT, FR, GA, GB, LU, NL, OE, SN, SW, TO, TS, ZR).

Mammalian tissue cells are tested for malignancy by assaying them for elevated levels of galactosyl transferase (GT). The test is now improved by adding to the cells a marker (M), which can be detected non-chemically and has specific affinity for galactose or galactose residues. The amount of (M) bound to the cells is then measured.

(M) is pref. a lectin, specifically RCA_{120}, coupled to a fluorescent dye, specifically fluorescein.

The method provides a rapid, direct, inexpensive and noninvasive test for cancer. The chemical assay required in known methods is avoided and larger no. of cells can now be screened.

11.4.80 as US0391 (16pp1251).
(E) ISR: US4132600; US4087331; US3616254; US3558435; 8 Journal References.

RESE ★ D16 90100 C/50 ★WP 8002-504
Vaccine contg. genetically attenuated bacteria - with two or more mutation(s) of the same pheno-type
RESEARCH CORP (KATS) 23.05.79-US-041896
B04 C03 (27.11.80) A01n-63 A61k-39/02 C12n-01/20 C12n-15
D/S: N(DK, JA).

(A) A vaccine comprises a genetically-attenuated, avirulent but immunogenic bacterial strain contg. ≥ 2 mutations of the same phenotype, plus an inert carrier.

Pref. the phenotype (a) is temp. sensitive (TS); (b) suppresses replication in absence of a growth factor (particularly an antibiotic); (c) suppresses toxin formation or (d) suppressed invasiveness. Pref. the bacterium is Haemophilus influenzae contg. ≥ 2 mutations of the same TS-phenotype which supress growth at normal body temp. Specifically the strain A214-A/3-C2/13 is used.

(B) The bacterial strains themselves are claimed.

The strains used have identical surface antigens to the pathogens; mimic natural infections but have very low ($< 10^{-20}$) reversion frequencies compared with strains with only one mutation or with mutations of different phenotypes. The vaccines can be stored, freeze-dried, without refrigeration. The H. influenzae vaccine is useful for preventing meningitis.

23.5.80 as US0613 (37pp1251).
(E) ISR: US4190495; US4133875; US3975517; US4058599; US3855408; US4169886; US3856935; 8 Journal References.

PENT- D16 86899 C/49 =WP 8002-
Tri:peptide derivs. with C-terminal chromophore gp. - useful substrates for assaying proteolytic enzymes, e.g. kallikrein thrombin
PENTAPHARM AG (SVEN) 06.05.80-CH-003515 (11.05.79-004412)
*B05 J04 (27.11.80) *EP--19-589 C07c-103/52 C12q-01/36*
D/S: N(AU, DK, JA, NO, US)

Tripeptides of formula (I) and their salts with acids are new:

H-D-X-Y-Z-R (I)

(X = (a) cyclohexylglycyl, cyclohexylalanyl, p-hydroxy-cyclohexylalanyl, phenylglycyl, phenylalanyl, tyrosyl, or (b) leucyl, isoleucyl, norleucyl, valyl, norvalyl, α-amino butyryl, alanyl, prolyl or pipecolinyl;
Y is as X, gp. (a), or, provided X is one of gp. (a), Y can be one of gp. (b) above;
Z = Arg or Lys;
R = a chromogenic gp. which can be cleaved by enzymat hydrolysis to release a coloured or fluorescent cpd.).

(I) are substrates for quantitative determination of proteolytic enzymes, particularly of the class E.C. 3.4.2 and specifically kallikrein, plasmin and thrombin in body fluids. They can also be used to assay inhibitors and activators of such enzymes.

8.5.80 as CH0055 (95pp1251)
(G) ISR: FR2353063; FR2183188; US4061625; US414769 DT 2629067; DT 2527932.

OSTE/ ★ D16 90129 C/50 ★WP 8002-5
Detecting impending ovulation by testing for peroxidase - in vagin fluid, simple enough for self examination
OSTER G 16.05.79-US-039273
B04 S03 (S05) (27.11.80) C12q-01/28 G01n-33
D/S: N(JA) + E(CH, DT, FR, GB, LU, NL, OE, SW).

Impending ovulation in humans is detected by testing for peroxidase (I) in a vaginal fluid sample. Pref. (I) is used to cause a change in colour or luminescence, and is esp. detected using a porous material or pill contg. a chromogenic substrate and opt. a peroxide.

Specified detection systems are (i) guaiac; (ii) o-tolidine plus cumene hydroperoxide or dimethoxy dihydro peroxy hexane (porous mat) or SrO_2 (pill); (iii) starch pl soluble iodide; (iv) p,p'-biphenol; (v) o-tolidine or 3,3', 5,5'-tetramethylbenzidine (II) plus soluble iodide; (vi) (II) plus soluble bromide or thiocyanate; (vii) o-dianisidine plus soluble iodide and (viii) bilirubin.

The method is simple enough for self-testing. It detects the increase in (I) which occurs 2-3 days before ovulation.

16.5.80 as US0618 (15pp1251).
(E) ISR: US3472738; CA-854156; 1 Journal Reference.

See Also

D11 J5 5138352	D11 SU 730334	D13 CS 7903663
D13 J5 5138368	D13 SU 730336	D13 US 4235933
D16 US 4235966	D17 US 4235968	D22 US 4235967

D17: SUGAR; STARCH

BRBL D17 14432 Y/08 =DS 2550-496
Centriguging massecuite to produce sugar crystals - then dissolving in liquid spray at rim of centrifuge to form syrup
BRAUNSCHWEIG MASCH 11.11.75-DT-550496
*P41 (04.12.80) *US4008-098 B04b-15/12*

Sugar crystals in a continuous centrifuge are thrown at high speed against a collector ring of dome shape to effect an impact comminution. On the way to the collector ring the crystals pass over a throw-off flange with a line of spray nozzles which directa fluid screen at right angles to the flange.

An intermediate bottom plate collects the sugar soln. which can pass through a slot between this bottom plate and the end of the collector ring. An annular overflow plate with an upper edge above the bottom edge of the collector ring allows the sugar soln. to be discharged.

The discharge from this centrifuge consists of a sugar soln, free from crystals and with a high concn. 11.11.75 as 550496 Add to 2560226 (6pp39)

SELW- ★ D17 88546 C/50 ★DT 2921-87
Lime mud press - with graduated mesh sizes on outer and inne screen tubes of annular press space
SELWIG & LANGE MASC 30.05.79-DT-921871
J01 (04.12.80) B01d-29/04 C13d-03/02
A press for lime mud, esp. for dewatering the lime mud from the extn. of the juice in the sugar beet industry, consists of an outer screen tube which forms with an

nner screen tube an annular press space. The latter has variable discharge slot with a spring-loaded closure ing. The screen tubes consist of a fine screen with mesh izes between 0.01- 0.1mm and divergent holes, a supp-rt screen with larger mesh sizes and a support tube ith still larger perforations.

Such a press costs only a fraction of a conventional late press. Clogging of the meshes is eliminated. 0.5.79. as 921871 (17pp39)

STEL- ★ D17 88566 C/50 ★DT 2922-265

Agitator for sugar crystalliser - having agitator element with side supports and adjustable flights to generate recirculation inside vessel

FA STELZER E 31.05.79-DT-922265

(04.12.80) B01f-05/10 C13f-01/02

gitator is for use inside cylindrical sugar boiler to make ugar crystals. The thick syrup is recirculated around a ircular steam chest through which extends a bundle of ubes.

Above the heater is mounted an agitator element with central rotating shaft. This is supported by three arms et at 120° to each other, fixed to the sides, through one f which a drive shaft enters. The angle of the agitator lights is adjusted to create the desired recirculation ffect.

Used for prodn. of sugar crystals. Gives reduced eight for the veseels thus saving space and giving a ore uniform crystal size in the sugar produced. 1.5.79. as 922265 (12pp1053)

ORP D17 92371 X/50 =US 4235-965

onc. dispersions of liquefied starch prepn. - by adding granular arch to starch hydrolysate dispersions contg. alpha amylase

CPC INTERNATIONAL INC (MAIS-) 12.05.76-BE-841714 (12.05.76-BE-055022)

*(25.11.80) *BE-841-714 C12p-19/22*

q. slurry (I) of liquefied and solubilised starch is prepd. from an aq. slurry (II) of starch hydrolysate having D.E. 1 to 25 and solids concn. 40 wt.%. Granular starch is gradually added to the slurry (II) held at a temp. below the normal gelatinisation temp. of the starch, in the presence of bacterial α-amylase to liquefy the granular starch. The temp. is gradually raised from 60 to 90°C during addn. of further starch, but is controlled to ensure non-gelatinising conditions for the added starch. When the total dry substance of the slurry is 47-70 wt.% the addn. of starch ceases and the slurry (I) is recovered.

The starch has D.E. 9.1 to 17.5, (I) with extremely high solids content can be obtd. 16.10.78 as 951538(+25.5.77 -US-793216)(6pp945)

PILI/ D17 20669 C/12 =US 4235-968

Saccharification of cellulosic materials - by hydrolysis in anhydrous liq. hydrogen halide

PILIPSKI M 24.08.78-US-936646

*E13 F09 (D16 E17) (25.11.80) *EP---8-914 C13k-01/02 +C12c-11*

Raw cellulose material from any source is saccharified by (A) steeping in a caustic soln. to swell the cellular structure of the material to make it more reactive and to solubilise the lignins, etc. (B) washing out the solubilised: lignins, etc. a prepd. cellulosic material; (c) subjecting this to viscose processing to produce a viscous soln. of Na cellulose anthate in aq. NaOH;(d) removing the aq. pha -se; and (e) hydrolysing the obtd. residue viscose intermediate, by immersing it in a bath of anhydrous liq. HCl to yield a usable glucose and other prods.

Process is efficient and economic and gives high yields The glucose can be fermented to ethanol, Other useful by-products can also be recovered. The starting material is e.g. saw dust. 24.8.78 as 936646(4pp945)

See Also

D13 GB 1580912 D15 J5 5109496 D16 US 4235970

D18: SKINS; HIDES; LEATHER; TOBACCO

GA ★ D18 C/50 ★BR 8001-961

ter element

CIGARETTE COMPONENT LTD 25.01.80-GB-002528 (27.03.79-US-024251)

J01 P15 (25.11.80) A24d-03/02 27.3.80 as 001961

AR/ ★ D18 C/50 ★CS 7902-063

ather lubricant based on leather wastes

SZARAZ J 29.03.79-CS-002063

H07 (29.08.80) C14c-09/02

LT- ★ D18 88422 C/50 ★CH -620-133

ltering aid for coating filter - consists of particles with buoyancy to eight ratio of under 0.75 and over specified figure

FILTROX MASCH AG 05.02.77-CH-001378

J01 (14.11.80) B01d-37/02 B01d-39/02

coating filter for applications where extremely high de-ands are made on the clarification action of the fluid-rne layer, e.g. for the filtration of beer, uses two types filtering aids. The first consists of particles such as atomite with a ratio between particle buoyancy and parti-e weight of under 0.75. The second filtering aid has a tio of over 0.75, pref. 0.9-1 and consists of particles th a volcanic rock with gas inclusions, which has been flated to the structure of pumice stone.

This prevents the often defective filtration in the top eas which is caused by the faster rate of descent of the tering aids. 5.2.77 as 001378 (9pp39).

CHCC D18 55363 A/31 =DS 2801-211

Synthetic fibre tobacco filters - of composite polypropylene-EVA fibres, heat treated to above the EVA m.pt. to stabilise the filter

CHISSO CORP 19.01.77-JA-004757

*A97 F04 P15 (A18) (04.12.80) *DT2801-211 +A24d-03/08*

Tobacco filters are made from a fibrous bundle of 20-100 wt.% combined fibres and 80-0 wt.% other fibres. The com -bined fibres are made of (1) chiefly crystalline polypropylene or a copolymer contg. mainly propylene and (2) an ethylene-vinyl acetate copolymer (vinyl acetate 0.5-18 mole%) or its saponified prod. or their mixts. with polyethylene the fibres of components (1) and (2) being joined either in a side-by-side or a jacket-round -nucleus arrang -ement, the two components having a circumference ratio of 60-100% of the fibre cross-section. The combined fibres are heated to a temp. lower than the m.pt. of comp -onent (1) and higher than the m.pt. of component (2) to effect adhesion without use of solvent and adhesive.

The filters have good adsorbtion powers and are permeable to air. 12.1.78 as 801211 (9pp068)

FARB ★ D18 88578 C/50 ★DT 2922-482

Azo dyes for simultaneous tanning and dyeing of leather - prepd. from diazotised aromatic cpd. and sulphonated tanning agent

BAYER AG 01.06.79-DT-922482

E21 (04.12.80) C09b-29/32 C09b-45/14 C14c-03/18

New tanning dyestuffs (I) are prepd. by coupling a diazotised aromatic cpd. (II) with a water-soluble tanning agent (III) and opt. reacting the product with a heavy-metal salt.

Specifically, (III) in a condensation product of (a) HCHO or an HCHO-releasing cpd., (b) an opt. sulphona-

ted aryl ether, naphthalene, terphenyl and/or phenol/urea mixt. or a dihydroxydiaryl sulphone, and (c) a sulphonating agent if component (b) is SO_3H-free. (II) is pref. a diazotised mono- or diamino-benzene, -naphthalene, -thiazole, benzothiazole, -thiadiazole, -triazole, -pyrazole or lthiophene deriv.

(I) are esp. useful for after-tanning of chrome-tanned leather, giving a good tanning effect with uniform colouring, high colour intensity and good light and wash fastness. 1.6.79. as 922482 (28pp367)

BUTC/ ★ D18 88692 C/50 ★FR 2450-045

Machine to strip tobacco leaves from their stalk - supports stalk as each leaf is pulled away between nip rollers

BUTCHER L D 01.11.78-US-956667

X25 P12 P15 (31.10.80) A01d-33/02 A01d-45/16 A24b-03/07 C05f-11/02

The stalk of the plant is advanced axially in a support tube while the leaves extend to be gripped between nip rollers. The nipped leaves are pulled at an oblique angle to the axis of the advancing stalk. The length of the nip between the rollers is pref. at least equal to the width of a leaf before being pulled.

The stalk is pref. pulled through the support tube by a pair of rotating feed rolls which grip the stalk from opposite sides. The feed rolls pref. advance the stripped stalk to a cutter partic. a rotary knife, which chips the stalk into short axial lengths.

The support tube is pref. rotated on its longitudinal axis as the stalk is drawn through by the feed rolls. Detached leaves pref. fall on to a flat belt conveyor.

High productivity in that a single workman can strip as many leaves in an hour with this machine as he could by hand in a day. The machine is compact, light wt. simple to operate and requires little power. Delicate leaves are removed without damage. Stripped stalks are chopped up small enough to be used as agricultural fertiliser. 25.10.79 as 027165 (22pp448)

POPL ★ D18 88753 C/50 ★GB 2048-037

Vessel for mushroom cultivation - has apertured cover and associated porous plastics film which prevents invasion of bodies infectious to mushroom cultivation

POLYPLASTIC 07.05.79-JA-U60321

A92 P13 (10.12.80) A01g-01/04

The vessel comprises a container having an apertured cover and a porous plastics film which is permeable to gas but impermeable to bacteria and microbes infectious to mushroom cultivation disposed between the cover and the container so as to extend over the aperture(s) so that air can only pass into the container through the film. The cover comprises a flat outer plastics element having a peripheral side wall which is secured to the container and a separate inner flat plastics element which snap fits into a groove on the inside of the side wall of the outer element and serves as a support for the film.

The design of the cover completely prevents invasion of infectious bodies through the peripheral margin of the porous film. 22.1.80 as 002028. (6pp67)

CADB ★ D18 88781 C/50 ★GB 2048-251

Sucrose di-, tri-, and tetra-benzoate(s) - are useful as bittering agents for edible prods. esp. liquids.

CADBURY SCHWEPPES LTD 17.03.80-GB-008980 (16.03.79-GB-009358)

E13 (10.12.80) A23l-01/22 A23l-02/38 C07d-407/12

Edible prods. contain as bittering agent di-, tri- or tetra-benzoate (I) of sucrose. These bitters (I) are also novel. Specifically claimed cpds. are sucrose 6, 3^1, 6-tribenzoate (cpd.A), and sucrose 2, 6, 6^1-tribenzoate (cpd.B). Pref. (I) are added to compsns. at 1-100 ppm. Cpd. (A) has relative bitterness 500 (with quinine·HCl as 100).

(I) are prepd. by the partial benzoylation of sucrose with mol. ratio benzoylating agent:sucrose = 1.5-4.5:1, pref. 2-4:1. 17.3.80 as 008980. (4pp478)

MIST ★ D18 89049 C/50 ★J5 5138-38

Filter for tobacco - comprises wood pulp fibre treated with solven contg. cellulose ester

MITSUBISHI ACETATE (MITR) 17.04.79-JA-046896

J01 P15 (29.10.80) A24d-03/06

Bulky paper of surface area of 0.8 m^2/g is made of woo pulp fibre of specific vol. of 6-25 cm^2/g is treated with a solvent consisting of a cellulose ester, then the resulting sheet is shaped into a gel coat, and wound up into a rod. The organic solvent is coated onthe surface of the paper, or the paper is immersed in the organic solvent. The pick up amt. being 0.5-20 wt.% pref. 1-15 wt.%. The concn. of the cellulose ester in the organic solvent is 0.5-10 % The ester is diacetate, triacetate, propionate, etc.

The rod is useful as a filter for tobacco, where, tar an nicotin components in the tobacco can effectively be removed. 17,4.79 as 046896 (5pp22)

MITS ★ D18 89341 C/50 ★J8 0044-799

Preserving leather in sealed container - in presence of oxygen absorber, e.g. pyrogallol, oxalic acid, sodium sulphite, sodium dithionite, etc.

MITSUBISHI CORP 07.03.75-JA-027707

E19 (E34) (14.11.80) C14c-01

Preserving leather comprises storing leather in a sealed container in the presence of oxygen absorber (I). (I) is e.g. pyrogallol, oxalic acid, sodium sulphite, sodium dithionite, etc. Combination of sodium dithionite and SO_3-absorbing agent is pref. 7.3.75 as 027707, C14c-1/00 (14.11.80) MITSUBISHI CORP. (3pp83) (J51027707)

UEDA- ★ D18 89351 C/50 ★J8 0045-120

Treatment of raw hide for shoe heel core - by depilating, washing, immersing in aq. soln. of enzyme and defatting agent, soln. of preservative, chrome cpd. and tannin and neutralising

UEDA HATSUO SHOTEN 30.01.76-JA-009788

(15.11.80) C14c-03/02

Process comprises depilating and treating with water to remove dust and im purities. Resulting hide is immersed in aq. soln. of enzymatic agent and defatting agent. Hide is then immersed in aq. soln. contg. a preservative, chrome cpd. and a tannin and at appropriate time, neutralising agent is added. Finally hide is removed from the soln. and dried.

Treated hide has thermal resistance and oleo-osmosis resistance and does not cause deformation. 30.1.76 as 009788, C14c-3/02 (15.11.80) UEDA HATSUO SHOTEN & HIROYOSHI UENUMA KK (2pp15) (J52094401)

TORA ★ D18 89357 C/50 ★J8 0045-184

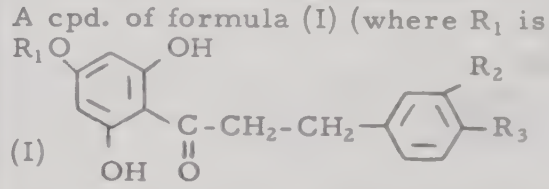
Neo:hesperidin di:hydro chalcone deriv. - used to improve tobacco flavour

TORAY IND INC 20.04.73-JA-044132

E14 P15 (17.11.80) A24b-03/12

A cpd. of formula (I) (where R_1 is neohesperidocyl, R_2 is H or OH, and R_3 is OH, methoxy, ethoxy or propoxy) is added to tobacco to improve the flavour.

(I)



20.4.73 as 044132, A24b-3/12 (17.11.80) TORAY INDS.INC (3pp22) (J49132300)

TABA- ★ D18 C/50 ★RU -66-768

Neutralising agent for leather - formed by treating collagen hydrolysate with chromic, acetic and formic acids

TABACARIA MINERALA 14.05.77-RU-090332

(16.06.79) C14c-01

TOBA= ★ D18 89485 C/50 ★SU -730-341

Prodn. of smoking tobacco from waste - by mixing aq. ammonia treated stalks with water soluble material from waste tobacco leaves

TOBACCO RES INST 05.09.78-SU-661156

C04 P15 (30.04.80) A24b-03/14

Tobacco mfg waste is processed to obtain smoking tobacco prods and waste useful as fertiliser.

The smoking tobacco is obtd by treatment of tobacco

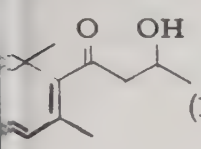
at stems with 5% aq ammonia at 100°C and atmos.
ss. The aq ammonia:stems ratio is 1:5. Then the re-
ing stems are crushed and fibrous pulp is treated
n conc aq extract of tobacco waste obtd by extn of con-
inated tobacco with water of 80°C using water:waste
o of 20:1 and concentrating the extract to 40% solids
ent. The resulting mixt contg. 10-50% water soluble
terial(from tobacco waste) is formed into a film and
ed.
The waste aq ammonia(contg. ammonium salts)and
acco waste extn residue are mixed in 1:30 ratio for
sequent use as fertiliser.
khnachev, I. G., Sichinaeva, R. B., Fedotenko, V. A.,
l Bul. 16/30.4.80. 5.9.78. as661156(3pp938).

UN D18 42574 B/23 =US 4235-189
plicator esp. for bronze powder to cigarette paper - is compact, kproof and handles the powder gently
HAUNI-WERKE KORBER KG 26.11.77-DT-752865
*P15 P42 (25.11.80) *DT2752-865 B05c-01/08 B05c-19*

paratus for applying powdered colourant to a running
b with one side partly or wholly adhesive, e.g. bronze
wder to cigarette paper, includes a conveyor with a hel-
lly grooved rotary element within a sleeve moving pow-
r from a source to an applicator, pref. a transfer wheel
m the periphery of which the powder is applied to the
b.
Powder not adhering to the web is returned to the groo-
upstream of the wheel chamber. The sleeve has an out-
downstream of the chamber to return to the source pow
r carried beyond the chamber. The sleeve pref. has a
gitudinal slot for a brush with bristles extending into
groove to prevent powder agglomerating. 16.11.78 as
1197(5pp1358)

L ★ D18 89848 C/50 ★US 4235-247
ancing aroma or taste of smoking tobacco - by addn. of pure 3-roxy-1-tri:methyl-cyclo hexa:dienyl-1-butanone
INT FLAVORS & FRAGR INC 15.09.78-US-942529 (27.01.78-US-872975)
E15 P15 (25.11.80) A24b-15/30

eet floral, dried fruit like natural tobacco aroma or taste
racteristics of smoking tobacco is augmented or enhanc
-ed by mixing the tobacco with 50-1500 p.p.m. of pure 3-hydroxy-1-(2,6,6-tri-methyl-1,3-cyclohexadien-1-yl)-1-buta-none of formula (I): When the tobacco is


(I)

smoked there are sweet and dried fruit aroma characteristics in the mainstream and sidestream. (I) may also be incorporated in solid and liq. foodstuffs, chewing gum, medicinal prods., toothpaste compsns. and flavouring compsns. for toothpastes, cosmetic prepns. per-fumes and colognes. Tobacco contains 50-1500p.p.m. (I). 15.9.78 as 942529(16pp1248)

PHIM D18 56315 B/31 =US 4235-250
Expanding tobacco to increase its filling capacity - by impregnating with gaseous carbon di:oxide then heating
PHILIP MORRIS INC 29.03.78-US-891290
*P15 (25.11.80) *BE-875-083 +A24b-03/18*

Tobacco is expanded by (i) contacting tobacco with CO_2 gas at ⩾ 250(400-800)psig. for a time sufficient to impregnate the tobacco with CO_2 to form a gaseous CO_2-tobacco system; (ii) releasing the pressure; and (iii) rapidly heating the tobacco to remove the CO_2 and expand the tobacco. Improv-ement comprises cooling the gaseous CO_2 and tobacco in step (i) to a temp. close to the saturation temp. of CO_2 but not below -23°C.
The tobacco has an ⩾ 50% increase in cylinder volume and so has a reduced density. 29.3.78 as 891290(10pp982)

LIGG- ★ D18 89849 C/50 ★US 4235-251
Deposition of palladium on smokable tobacco - using aq. casing system contg. palladium stabilised with polysaccharide protective colloid
LIGGETT GROUP INC 21.02.79-US-013574
P15 (25.11.80) A24b-15/42

Pd is deposited on smoking tobacco as follows: (a) Pd is added to an aq. casing system which contains 0.25-1% by wt. of 1 or more polysaccharides (I); and (b) the Pd-contg. casing system is mixed with tobacco. (I) is a natural gum, or a lower alkyl(opt. contg. OH) or lower alkoxy ether or ester of cellulose.
Incorporation of (I) as a protective colloid improves the stability of Pd in tobacco casing systems. The method is esp. useful in casing systems contg. high concns. of Pd. Pd is known to reduce the amt. of polycylic aromatic hydro-carbons in tobacco smoke. 21.2.79 as 13574(4pp478)

D2: DISINFECTANTS; DETERGENTS

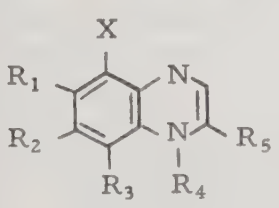
D21: DENTAL; TOILET PREPARATIONS

NA/ ★ D21 88386 C/50 ★BE-884-577
ns. for skin treatment - contg. animal tissue extracts which have n treated with an electric current
DONADELLI F 04.07.80-IT-023233
B04 S05 (17.11.80) A61k C12n

mpsns. for topical application contain animal tissue ex-cts which have been subjected to a low frequency alter-ing electric current that gives electrically excited pro-n groups.
Used for nutrition, regeneration, and revitalisation of skin. Suitable animal tissues may be from placentas, bryos, collagen, citreous humour, muscle, cardiac scle, total skin extract, bovine foetus, ovarian extracts, junctive tissue, mammary glands, liver, brains and like. The passage of the carrier wave electric curr-converts the proteins into polypeptides. 31.7.80 as 577 (10pp520)

OREA D21 14010 R/09 =DS 1921-911
Hair dye
L'OREAL SA 14.06.68-LU-056271
*E19 E24 (04.12.80) *DT1921-911 +A61k-07/13*

Dye for human hair comprises (a) ⩾ 1 aromatic cpd. with either 2 amino gps. or an amino gp. and a hydroxyl gp. in ortho-or para- positions to each other, e.g. p-phenylene diamine and 2,5-diaminopyridine (b) a benzimidazole deriv. (I) or acid addn. salts and (c) opt. other dyes and usual additives. In (I) X is -OH or $-NH_2$; R_1, R_2, R_3 and R_5 are H or $-CH_3$ and R_4 is H or 1-4C alkyl; at least one of R_1 and R_3 are H and 4-hydrobenzimidazole and 2-methyl-4-hydroxybenzimidazole are excluded. Cpd. (I) may be 4-hydroxy-7-meth-ylbenzimidazole or 2-methyl-4-amino-benzimidazole.



Dye gives a strong dye scale of blonde to blue and

green. 29.4.69 as 921911(4pp068)

HENK D21 23145 V/13 =DS 2243-281
After bath(e) skin compsn - for restoring the natural oils lost and re generating skin layers, also for sunbathing use
HENKEL KG AUF AKTIEN 02.09.72-DT-243281
*(04.12.80) *DT2243-281 A61k-07*

A skin care agent to restore the skin after washing or bathing comprises a clear mixt. of fats normally used in cosmetics and as emulsifier partial esters of polyalcohols and oleic and/or ricinoleic acid and their ethylene oxide addn. prods. The ratio of fat to emulsifier is 75:25 to 93:3 wt.% and pref. 85:15 to 95:5 wt.%.

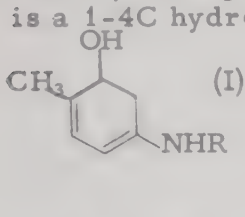
The agent pref. also contains 1-10% ethanol (based on total wt. of mixt.) a substance absorbing U.V. light and a substance preventing burning by the sun. The agent has a rapid effect as the emulsion penetrates the outer layer of skin. 2.9.72 as 243281(3pp068)

SAUE D21 76135 Y/43 =DS 2616-939
Soluble collagen prodn. for use in cosmetics - from placental extraction residues
SAUERBRUCH BOTTGER KG (BOTT-) 17.04.76-DT-616939
*A11 (04.12.80) *DT2616-939 C07g-07*

Soluble collagen, useful in cosmetic prepns., is recovered from the ether-contg. residue obtd. in the extn. of fresh placentae, e.g. to recover hormones, fats and lipoid material. The residue is pref. washed at 0-3°C with a buffered weak NaCl soln. to remove part of the unwanted protein present and then extracted for 2-6 days with a sufficient amt. of a neutral salt soln. Soluble collagen may be pptd. from the neutral salt extract by NaCl soln. and may be dissolved in a buffered soln. of placenta extract of pH< 7 contg. a preservative. 17.4.76 as 616939 (4pp068)

OREA D21 04270 Y/03 =DS 2628-641
Oxidising hair dyeing compsns. - contg. 2-methyl 5-N-hydroxyalkyl amino phenol coupler and phenylene diamine or aminophenol base NL281276)
L'OREAL SA 26.06.75-FR-020154
*E24 (04.12.80) *DT2628-641 A61k-07/13*

Hair dye comprises (a) ⩾1 coupler of formula (I) (where R is a 1-4C hydroxyalkyl gp) (b) ⩾1 oxidn. base which is a para. and/or ortho-phenylene-diamine or a para- and/or ortho aminophenol which can be substd. and/or heterocyclic bases and opt. (c) usual additives. The pref. coupler is 2-methyl-5-N-β-hydroxyethylemino phenol. The dye is storage stable and longlasting. 25.6.76 as 628641 (7pp068)



(I)

NATH/ ★ D21 88454 C/50 ★DT 2920-204
Dental plastic polymerisation - by optical light guide at initially reduced voltage for beam alignment
NATH G 18.05.79-DT-920204
A35 S05 P32 (A96) (04.12.80) A61c-05/04

An appts. for the polymerisation of dental plastics (tooth filling) by visible radiation includes an incandescent lamp, a reflector and an optical light guide. A transformer with a tapping supplies to the lamp a voltage low enough (20-30% of nominal) to allow the light beam to be directed to the spot desired, without producing any polymerisation.

This eliminates the dazzling effect of the beam at full power and allows any adjustment to a filling before the full power is turned on. The life of the lamp bulb is increased because the high current inrush when switching ON at full voltage is eliminated. 18.5.79. as 920204(13pp)

DEGS ★ D21 88508 C/50 ★DT 2921-192
Dental alloy casting appliance - with mould shell centred by collar on furnace cover against melting crucible
DEGUSSA AG 25.05.79-DT-921192
M22 P53 (04.12.80) B22d-18

A casting appliance, specially for vacuum-pressure casting techniques for articles in dental alloy, consists of a melting furnace which carries in a dished cover a graphite crucible. The cover has around the bore for th crucible an annular centring collar which fits into the casting funnel of the mould shell and aligns it relative t the crucible.

This creates an exact centring device for the mould shell relative to the crucible which is easy to produce and to detach. Rapid crucible burn-up and fast draughts during the pressure cycle are eliminated. 25.5.79. as 921192 (9pp39)

HEIT/ ★ D21 88588 C/50 ★DT 2922-
Dentifrice contg. agent for staining dental plaque - for monitor plaque formation
HEITLAND S 01.06.79-DT-922524
(04.12.80) A61k-07/16

Plaque-staining agent (I) pref. has a short staining time and may be designed to produce different staining reactions on plaque layers of different age. The pH of (I) should be substantially the same as that of the rest of th toothpaste compsn.

Use of the toothpaste permits daily monitoring of plaque formation without the need to dissolve tablets, et 1.6.79. as 922524 (5pp367)

BATT ★ D21 88598 C/50 ★DT 2922-6
Chewable dentifrice compsns. - comprising chewable base a abrasive particles
BATTELLE-INST EV 02.06.79-DT-922671
A97 (04.12.80) A61k-07/16

Dentifrice compsns. comprise a chewable base material contg. abrasive particles with a particle size of 0.1-100 μm, opt. together with surfactants, anticariogenic agents and conventional additives.

Regular use of the compsns. is stated to satisfy the requirements of everyday oral hygiene.

The abrasive particles can comprise inorganic and/or organic materials and are pref. present in an amt. of 0.20 wt.%. Suitable materials include $CaCO_3$, Ca phosphates, Ca lactate, $CaSO_4$, $Al(OH)_3$, Al_2O_3, MgO, $Mg(OH)_2$, Mg trisilicate or pyrophosphate, SiO_2, and indigestable polysaccharides (esp. ground cellulosic components of cereal grains). 2.6.79. as 922671 (7pp367)

SQUI ★ D21 88686 C/50 ★DT 3020-6
Antiinflammatory corticosteroid in the form of a stick - contg. an o solvent, a wax, and an antimicrobially active cpd.
SQUIBB E R & SONS INC 31.05.79-US-044293
B01 +P33 (04.12.80) A61j A61k-07 C07j

Cosmetic stick mass with antiinflammatory activity contains (A) a corticosteroid, e.g. halomonide dissolved in ⩾1 oil-like solvent; (B) ⩾1 consistency-imparting wax substance e.g. beeswax and (c) an antimicrobially active cpd. e.g. propylene glycol in an amt. of ca. 1-25% of the total wt. of the mass.

Useful as a topical antiinflammatory compsn. for the treatment of dermatitis (e.g psoriasis). Rapid and easy application of the active ingredient without the fingers coming into contact with the corticosteroid is achieved. Incorporation of the antimicrobial agent prevents the stick itself becoming infective after contact with infected skin. 30.5.80. as 020616 (15pp280)

BOUQ/ ★ D21 88701 C/50 ★FR 2450-1
Developer for dental plaque - contg. quinoline yellow and pate blue V and/or indigotin
BOUQUET P 01.03.79-FR-005357
B05 E24 P31 P32 (31.10.80) A61b-10 A61c-19/04

The developer consists of quinoline yellow (E104) and a 2nd colourant chosen from Patent Blue V(E131) and indig -tin (E132) or a mixture of these.

A pref. developer is a 4% soln. of an 85%/15% quinoli yellow/ patent Blue mixture. The developer is pref. in t form of water-soluble tablets.

The developer reveals the presence of the plaque thus facilitating its removal by brushing. It gives an excellent contrast and is non-toxic. 1.3.79 as 005357 (4pp597)

EHRN/ D21 48861 Y/28 =GB 1581-067
Fine porous glass mesh reinforcement for dental cements - which is impregnated with resin to enhance matrix strength and life
EHRNFORD L E M 16.03.76-SW-003313
*A96 P32 +P73 (10.12.80) *BE-852-458 C03b-23/20 +D04h-01/54*

Dental compsn. comprises porous three-dimensional network consisting of fibres of inorganic material fused to each other at their points of contact. The network is wholly or partly impregnated with polymer.

Pref. the fibres are made of glass and have a dia. of < 100μ (< 10μ). Pref. the impregnant is hardenable methylmethacrylate polymer, epoxy resin or silicone elastomer.

The compsn. fulfils high standards of appearance, strength, stiffness and wear resistance, and high requirements for living tissue attachment. 15.3.77 as 010931. (4pp964)

HOFF D21 38496 A/22 =GB 1581-377
Cosmetic compsn. esp. dry shampoo, contg. coloured cellulose - as fine powder, coloured esp. with metal oxide pigments or oxidn. dyes
HOFFMANN-LA ROCHE AG 29.11.76-CH-014998
*E24 (E31) (10.12.80) *BE-861-261 A61k-07 +C11d-03/37*

Cosmetic prepn. contains pulverous cellulose coloured with colour-imparting substance (I) which is neither water-soluble nor soluble in organic solvents. Pref. the cellulose has particle size 5-40 (esp. 10-30)μm. (I) is pref. oxidn. pigment or metal oxide (esp. Mn or Fe oxide). Prepn. may contain perfume(s) and/or bactericide(s).

Prepn. is specifically incorporated in a dry shampoo, coloured antiseptic powder or make-up. Prior disadvantages such as deposition of residue on the scalp and hair are eliminated. 28.11.77 as 049359. (6pp936)

GILL ★ D21 88776 C/50 ★GB 2048-229
Antiperspirant aluminium chlor:hydroxide(s) - contain slow complexing aluminium complexes that show anomalous permeation and reaction rates in gel permeation chromatography
GILLETTE CO 20.04.79-US-032095 (20.04.79-US-031957)
A97 E33 (10.12.80) A61k-07/32 C01f-07/48

An Al chlorhydroxide (I) consists of ≮ 45% by wt. of an [Al(OH)] gp. of Al chlorhydroxide complexes (II) characterised by showing anomalous permeation and reaction rates in gel permeation chromatography and ferron tests.

(I) contg. large amts. of (II) is stated to be more efficacious as an antiperspirant than conventional Al chlorhydroxide; the efficacy of (II) is also concn. dependent. (I) are esp. useful in roll-ons, aerosols, and other anhydrous suspension-type compsns. 17.4.80 as 012758. (7pp478)

WHITE- ★ D21 88788 C/50 ★GB 2048-296
Prepn. of marbled soap - by mixing soap base with viscous colour base in a plodder
INTERGEN BEAUTY PRO 03.03.80-GB-007121 (05.04.79-GB-011893)
A96 (10.12.80) C11d-13/08

Marbled soap is prepd. as follows: a colour base (I) (1 pt. wt.) is mixed with a soap base (II) (≮ 50 pts. by wt.) in a plodder, then marbled soap is extruded from the plodder. (I) has viscosity ≮ 5000 cps. at 20°.

Simple, inexpensive, rapid method gives marbled soap with an excellent colour contrast which is easily controlled. In addn., the process is much more flexible than known methods and allows changes to and from the prodn. of ordinary soap in a few mins. 3.3.80 as 007121. (4pp)

LION C ★ D21 89181 C/50 ★J5 5139-311
Dental cement suppressing sec. decay - with components contg. phytic acid (deriv.) and metal salt respectively
LION DENTIFRICE KK 17.04.79-JA-047074
E11 (31.10.80) A61k-06/08

Dental cement is composed of (a) drug contg. phytic acid or its deriv. as the major ingredient and (b) drug contg. metal salt (except alkali metal salt) as the major ingredient and can be hardened by mixing (a) and (b) in the presence of water.

Phytic acid and itsderivs, react with metal salt in the presence of water and form a hardened prod. (e.g. compressive strength 200-350 kg/cm²), from which phytic acid is dissolved out little by little and suppresses the sec. decay of the tooth effectively. 17.4.79 as 047074 (7pp5)

KANE ★ D21 89182 C/50 ★J5 5139-312
Two layer-type cleansing lotion - contg. polyoxyalkylene-alkylphenyl-ether, oil, poly-hydric alcohol, water soluble salt and water
KANEBO KK 12.04.79-JA-044946
A96 (31.10.80) A61k-07

Lotion contains (a) 0.02-1 w/w% of polyoxyalkylenealkylphenylether; (b) 1-30 w/w% branch-structured ester oil; (c) 1-10 w/w% liq. polyhydric alcohol; (d) 0.1-1.0 w/w% water soluble salt; and (e/ 30-95 w/w% water as major components.

Lotion has an attractive two layer appearance and can be made into a homogeneous o/w type dispersion. Thus obtd. milk lotion is a stable dispersion, gives a refreshing feeling and can remove oil stains, secreted substances sebum, etc. easily from skin. 12.4.79 as 044946 (6pp5)

KANE ★ D21 89184 C/50 ★J5 5139-314
Pasty emulsified cosmetic pack - prepd. by combining bentonite contg. cation exchangeable sodium ion with oily substance, emulsifier and water
KANEBO KK 14.04.79-JA-045661
(31.10.80) A61k-07

The pack is prepd. by combining (a) 2-20 (4-10) wt. % bentonite contg. cation-exchangable 100 mg eq./100 g sodium ion (b) 2-25 w/w% (4-10) wt. % of oily, (c) 0.05-10 (0.1-5) wt. % emulsifier and (d) 30-95 (50-90) wt. % water.

The pack has excellent extending properties, smoothnexx thixotropy ect. and can be preserved for long time.

Above desirable properties of objective packing cosmetic are caused from the use of specific bentonite and similar effects can not be expected from conventional bentonite kaoline, etc., The bentonite contg. cation-exchangable sodium can be prepared by treating natural montmorillonite through specific physical-chemical treatment and by highly pure sodium montmorillonite having high ion exchangeability, hydrating property and swelling property, can be obtd. 14.4.79 as 045661 (6pp5)

ASAN- ★ D21 89186 C/50 ★J5 5139-316
Nail enamel - comprising undercoat and overcoat enamels, at least one contg. silicone
ASANUMA SOGYO KK 17.04.79-JA-046982
A96 G02 (A26) (31.10.80) A61k-07/04

Nail enamel is composed of an undercoat enamel contg. 0-10 wt. % of silicone and the overcoat enamel contg. 0-10 wt. % of silicone and is used by firstly undercoating nails and then overcoating them. so that patterns can be properly formed. At least one of the undercoating and overcoating enamels should contain silicone.

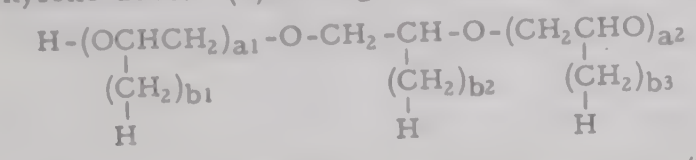
When silicone is combined in undercoating nail enamel. the overcoating nail enamel is partly repelled by the undercoating and patterns are formed. If silicone is incorporated in overcoating nail enamel, being low viscosity the overcoating nail enamel dissolves the undercoating partly and patterns are formed. When overcoating nail enamels of various colours are coated in layers, multichromic patterns can be formed. Silicone also serves to improve the glossiness, water resistance, abrasion resistance, etc. of the coated film and to improve the workability.

As silicone siloxanes such as methylpolysiloxane, dimethylpolysiloxane, methylphenyl-polysiloxane, methylhydrogen-polysiloxane and their derivs. can be used. 17.4.79 as 046982 (4pp5)

LIOC ★ D21 89187 C/50 ★J5 5139-317
Hair-dressing agent - contg. polyoxyalkylene deriv. obtd. by addn. polymerisation of alkylene oxide and mono- or poly hydric alcohol and its phosphoric acid ester
LION DENTIFRICE KK 14.04.79-JA-045767
A96 (31.10.80) A61k-07/06

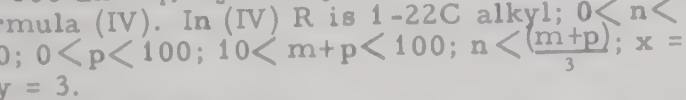
Agent contains (a) polyoxyalkylene deriv. obtd. by addn. -

polymerising alkyleneoxide and mono- or poly-hydric alcohol; and (b) phosphoric acid ester of polyoxyalkylene deriv. (a). Wt. ratio of (a) : (b) = 1:0.25-4 pref. 1:0.5-2. Polyoxy -alkylene deriv. (a) is e.g. of formula (II). In (II) a_1+a_2 =



(II)

10-100 and b_1, b_2 and b_3 = 1 or 2. Component (b) is e.g. of formula (IV). In (IV) R is 1-22C alkyl; $0 \leq n < 10$; $0 < m < 100$; $0 \leq p < 100$; $10 < m+p < 100$; $n < \frac{(m+p)}{3}$; x = 1-3; y = 0-2; x+y = 3.



(IV)

POA derivs. obtd. by using propyleneoxide and/or butyleneoxide as alkyleneoxide are pref. used. Ethyleneoxide is also used, but amt. is $\leq 1/3$ of the total amt. of propyleneoxide and butyleneoxide. POA deriv. and its phos -phoric acid ester have synergic hair-dressing effect.

Polyoxyalkylene deriv. (POA deriv.) partic. polyoxypropylene deriv. (POP) have been used as major ingredients in hair-dressing agents. Defects are that they are water insoluble and can not be washed out easily and in hair-dressing effect itself. Defects are removed by using POA deriv. (a) and the phosphoric acid ester of POA deriv. (b) together in specific proportions. 14.4.79 as 045767 (9pp5)

LIOY D21 14934 Y/09 =J8 0045-047

Polyolefin oils prepn. - using a catalyst derived from aluminium chloride and a multivalent alcohol deriv.

LION FAT & OIL KK 29.07.75-JA-092198

*A17 F06 H07 (A96 A97) (15.11.80) *DT2633-710 C08f-10/14 C10m-03/12 + C07c-02/22 C07c-11/02*

Prepn. of polyolefin oils by polymerisation at 50-150°C of an olefin, with $\leq$ 6C in the presence of a catalyst originating from a multivalent alcohol deriv. and an Al halide. The alcohol deriv.is obtd. by replacement of H, of all -OH gps. in the alcohol by 1-20C alkyl gps.

The use of the catalyst mixt. facilitates the sepn. of catalyst from the polymer reaction product. The sepd. cat -alyst can be used repeatedly for the polymerisation of fresh charges of olefins and the resultant polyolefin oils are halogen free, and possess a high viscosity index. They may be used for high grade lubricants e.g. gas turbine oils, gear oils and as a base for cosmetics and textile finishes.

In an example, 5.3 g ethylene glycol diethylether plus 12g AlCl, are reacted for 3 hrs. at 100°C, 600g Octene-1 are added and reacted for 5 hrs. at 120°C. Catalyst separ -ates from polyolefin standing and may be re-used repeat -edly for further polymerisation. Yields of polymers are $>$ 90%, viscosity indices are high, and prods. are halogen free. 29.7.75 as 092198, C07c-11/02, 2/22, C08f-10/14, C10m-3/12 (15.1.80) LION FAT & OIL KK (7pp) (J52015587)

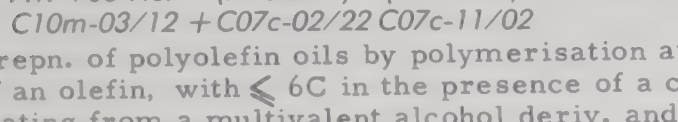
MATW ★ D21 89359 C/50 ★J8 0045-202

Heat regenerative type hair curling compsn. - contains carboxylic acid ester, useful for imparting permanent wave

MATSUSHITA ELEC WORKS 13.07.72-JA-070312

E17 P24 (E14) (17.11.80) A45d-02/36 C09k-05/06

The heat-regenerative type hair curler contains a cpd. of formula (I) (where R is methyl and/or phenyl), where R is



(I)

methyl has 304 of molecular weight, 84°C m.pt. and 0.28 ml/g degree specific heat rate. The cpd. where R is phenyl has 552 of molecular weight, 99°C m.pt. and 0.29 ml/g degree specific heat rate.

The hair curler is used for feeding the curls or the permanent wave to human hairs. 13.7.72 as 070312, A45d-2/36, C09k-5/06 (17.11.80) MATSUSHITA ELEC.WKS. (4pp15) (J49028458)

MATW ★ D21 89360 C/50 ★J8 0045-20

Heat regenerative cpd(s) used in curling of human hair - compris ethylene glycol-di:benzoate and/or glycerine-tri:benzoate

MATSUSHITA ELEC WORKS 04.10.72-JA-099654

E14 P24 (17.11.80) A45d-02/36 C09k-05/06

Heat-regenerative type of hot human hair rollers compris es the use of the heat-regenerative cpd. e.g ethyleneglyco -dibenzoate and/or glycerine-tribenzoate. The ethyleneglyc -col-dibenzoate has 270 of mol.wt. 73°C of m.pt. 0.25 cal/g/degree of specific heat rate and 37 cal/g of melting heat energy and the glycerinetribenzoate has 404 mol.wt. 76°C of m.pt. 0.27 cal/g.degree of specific heat rate and 35 cal/g of melting heat energy.

Rollers are used for treating human hair with curl se or permanent wave set. 4.10.72 as 099654 A45d-2/36, C09k-5/06 (17.11.80) MATSUSHITA ELEC.WKS (4pp15) (J49057958)

YANA- D21 59440 A/33 =J8 0045-527

Aq. paste contg. hydrogen peroxide, used for dyeing or bleaching hair - contg. ether type surfactant, higher satd. alcohol, higher satd hydrocarbon, phenacetin, and 8 hydroxy-quinoline

YANAGIYA HONTEN 23.12.76-JA-154287

*E36 (18.11.80) *J53078-985 A61k-07/13*

An opaque paste compsn.contg. hydrogen peroxide compri ses ether-form nonionic surfactant, higher satd. alcohol higher satd. hydrocarbon, phenacetin, 8-hydroxyquinoline and aq. hydrogen peroxide, and has pH regulated to 3-5. The hydrogen peroxide is stabilised and the compsn. is us -ful as a bleaching agent or dyeing assistant for hair.

The amt. of H_2O_2 in the compsn. is 0.5-12 pref. 1-8 wt %. Phenacetin and 8-hydroxyquinoline stabilise the H_2O_2, the amt. of phenacetin is pref. 0.2-1.0%, and that of hydroxyquinoline is pref. 0.01-0.05%. Higher satd. alcohol is satd. alcohol of $\geq$16C such as cetyl alcohol or stearyl alcohol, which is used in an amt. of pref. 1-8 wt %. Higher satd. hydrocarbon is paraffin. liq. paraffin, vaseline, etc. which is used in an amt. of pref. 10-35 wt %. Ether form nonionic surfactant used in an amt. of pref. 6-13 wt % is e.g. polyoxyethylene cetyl alcohol, polyoxyethylene steary alcohol etc. For adjusting pH inorganic acid such as phosphoric acid is pref. used. 23.12.76 as 154287, A61k-7/13 (18.11.80) YANAGIYA HONTEN (6pp) (J53078985)

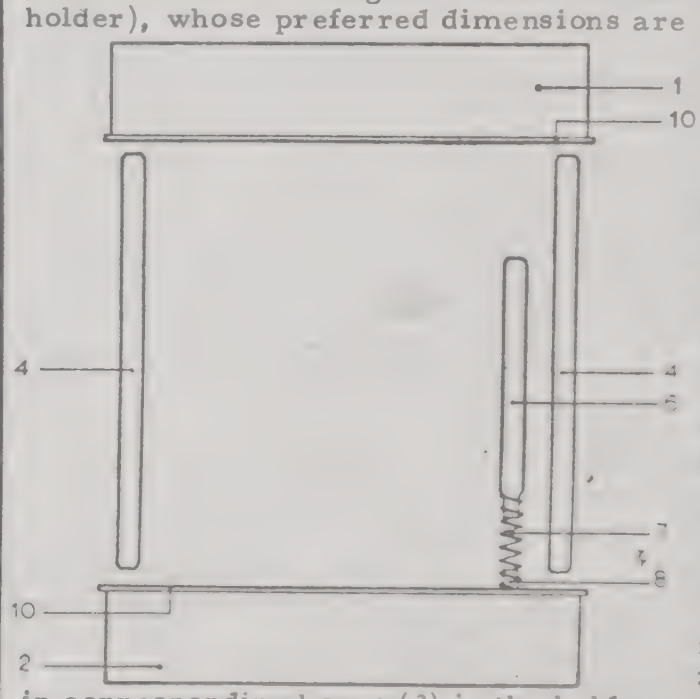
VDON/ ★ D21 89419 C/50 ★NL 8005-095

Making partial model for prosthetic dental work - using holders fo cast base of positive model having cavity with location ribs for base

VAN DONGEN C A 10.09.80-NL-005095

P32 (28.11.80) A61c-11

There are two rectangular model holders (2 is the upper holder), whose preferred dimensions are specified, each having an upwardly diverging open-top cavity whose longitudinal side walls are provided with wedge-section ribs (12) to form locating markings on the plaster model base cast therein.



The upper holder (2) can be located relative to the lower holder by means of locating pins inserted in corresponding bores (3) in the holders. A further bore (3) may be provided in the holder (2) to engage a spring-supported pin (6) of the lower holder permitting simulation of up and down, front to back and lateral chewing movement. 10.9.80 as 005095 (19pp1190).

RM- ★ D21 C/50 ★RU --67-357
i-acne lotion - contg. hexa:chlorophene(s), several organic acids
d salts, glycerol and alkali
FARMEC INTR PROD 23.11.76-RU-088518
B05 (28.07.79) A61k-07/47

RI- ★ D21 C/50 ★RU --67-557
ntal implant - has a standard shoulder on which the distal, mesial
d terminal sockets are based
STAT VERIF INTRETIN 01.07.75-RU-082731
P32 (20.08.79) A61c-13/10

RA- ★ D21 C/50 ★RU --67-788
e cleansing emulsion - based on lanolin, fats, Veronica
ccabunga extract, usual additives and distilled water
MIRAJ INTR PROD COS 26.09.77-RU-091657
E19 (28.07.79) A61k-07/04

RA- ★ D21 C/50 ★RU --67-789
eam shampoo compsn. - based on lanolin, vaseline, cetaceum,
yl alcohol, fats, alcohol(s) aromas and distilled water
MIRAJ INTR PROD COS 26.09.77-RU-091658
(15.08.79) A61k-07/48

RA- ★ D21 C/50 ★RU --67-790
smetic cream - based on lanolin, fats, Veronica beccabunga
rract and usual additives
MIRAJ INTR PROD COS 26.09.77-RU-091659
E19 (15.08.79) A61k-07/02

RA- ★ D21 C/50 ★RU --67-795
pillary lotion - based on ethanol, allantoin, salicylic acid,
ronica beccabunga, perfumes and distilled water
MIRAJ INTR PROD COS 26.09.77-RU-091661
E19 (28.07.79) A61k-07/06

OM= ★ D21 89488 C/50 ★SU-730-353
tallo-ceramic dental prosthesis material - contg. high and
dium viscosity colloxylin mixt., camphor, dye, amyl acetate and
etone
STOMATOLOGY RES 20.04.78-SU-615811
A96 P32 (02.05.80) A61c-09

tallo-ceramic dental protheses are made from a dyed
ymer.

Prosthetics of better quality are obtd by using compsn
mprising(in % wt): high viscosity colloxylic 3.0-4.0,
dium viscosity colloxylin 6.0-7.0, dyestuff 0.03-0.06,
mphor 0.5-0.6, amyl acetate 30.0-35.0 and acetone
remainder.

The material can be used for preparing 100 dental
otheses from one batch. Use of the above material en-
nces prothesis aesthetics and durable properties, as
ll as inhibiting cracking arising through the superpos-
on of an uneven layer of bulk porcelain.
lamkarov, Kh.A., Kharchenko, S.V., Batovskii, V.N.,
al Bul. 16/30.4.80. 20.4.78. as615811(2pp835).

GH ★ D21 89889 C/50 ★US 4235-631
rosion-resistant silver-copper-tin dental alloy - having controlled
rticle size and area to improve handling properties
ENGELHARD MINERALS CORP 24.08.78-US-936667 (17.01.77-US-760181)
M26 P53 (25.11.80) B22f-01 B22f-09

rrosion-resitant dental fillings alloy comprises a mixt.
random-shaped aq. Cu and Sn particles having a surface
ea at least 20% greater than the surface area of a spher-
l particle compsn. but $< 0.33 m^2/g$.

An a prepd. mixt. the mean particle size is 20-26.5u
the size range is 1-75u, at least 90% pref. being 10-52
The surface area of the compsn. is pref. 0.22-0.31m^2/
more pref. 0.23-0.26m^2/g.

The amalgamated alloy has a corrosion resistance com-
rable to a spherical particle compsn. of surface area
.22m^2/g. whilst retaining handling props. comparable
a flakey particle compsn. of surface area $\geq 0.33 m^2/g$.
4.78 as 936667(8pp314)

GCDE- D21 58357 B/32 =US 4235-633
Reactive dental mixt. hardening at room temp. - contains water-insoluble acid alkyl phosphate, polyvalent metal salt, opt. resin and accelerator
G-C DENTAL IND CORP 27.01.78-JA-007380
*A96 + P32 (25.11.80) *DT2902-713 + C08l-93/04 C09k-03*

Dental compsn. comprises (i) 8-92 wt. % of liq. acid phop-hates obtd. by replacing 1 or 2 H atoms of arthoghosphor-ic acid with 3-13C alcohols which are insol. in water, (2) 92-8 wt. % of reactive multivalent metallic salt(s) selected from (hydr)oxides, baric salts and silicates of alkaline earth metals, Al or heavy metals.

Compsn. also contains 50-5 wt. % of at least one of sparingly soluble fluorides, silico fluorides, Ti fluorides and Zr fluorides serving as reaction accelerator (based on wt. of acid phosphates). The cpds. are reacted with each other such that they are cured at room temp.

The compsn. is free from offensive odour and has free-ly adjustible viscosity due to its low density. 16.1.79 as 003792(7pp977)

KAOS D21 06033 C/04 =US 4235-733
Soap contg. tri:chloro-hydroxy-di:phenyl ether antibacterial - and phosphorus oxyacid or alkyl-phosphate to prevent discolouration
KAO SOAP KK 13.07.78-JA-085379
*A96 E19 (25.11.80) *GB2025-451 C11d-09/34*

Antibacterial soap comprises 0.05-5 wt. % 2,4,4-trichloro-2'-hydroxy-diphenylether and 0.1-20(0.5-5)wt. % of ≥ 1 is organic phosphoric ester of formula (I)(where R is 8-20 C alkyl, R_2 is H or Me and n=1-10; R' is as R or alkali metal and M is H an alkali metal

$$RO-\overset{\overset{O}{\|}}{\underset{\underset{OR'}{|}}{P}}-OM \quad (I)$$

Pref. (I) is 8-20C monoalkyl phosphoric ester.

The soap is useful for skin and hair treatment. It has wide range of antibacterial activities and marked resistance to discolouration upon exposure to light. 11.7.79 as 056559(4pp964)

LIOY D21 08287 C/05 =US 4235-759
Liq. cleaning compsns. with anionic and cationic surfactant components - which do not irritate skin, are of low viscosity and have high effectiveness even towards oils
LION FAT & OIL KK 07.06.78-JA-068534
*A97 (A25) (25.11.80) *J54159-416 C11d-01/65*

Novel liq. detergent compsns. have as the synthetic organic detergent compsn. 1-40 wt. % of a mixt. of 1-8 mol. pts. anionic surfactant $R'O(CHR''.CH_2O)mSO_3M$ (I) and 1 mol. pt. cationic surfactant $NR_1R_2R_3R_4^+ X^-$ (II) In the formulae R' is 8-16C alkyl. R'' is H or CH_3, m is 1-6, M is an alkali metal, ammonium or alkanolamine. R_1 is 8-14C alkyl. R_2 and R_3 are each CH_3, C_2H_4OH or $(C_2H_4O)_2H$. R_4 is benzyl or as R_2. X is halogen, CH_3SO_4 or $C_2H_5SO_4$. Pref. the pH of the compsn. is 5-8. Pref. the balance of the compsn. is water. Pref. the ratio (I):(II) is 4-1:1. Pref. the total of (I) and (II) is 5-25 wt. %.

Compsns. have good detergency and are mild to human skin. 4.6.79 as 045134(5pp974)

DERM- ★ D21 90003 C/50 ★US 4235-873
Antiperspirant and deodorant compsns. - contg. metal salt adduct of bis. 2-pyridyl-N oxide di:sulphide
DERMIK LABS 30.03.79-US-025389
E12 (25.11.80) A61k-07/32 A61k-09/12

Body odour and perspiration in warm-blooded animals is suppressed by topical administrationof a compsn. contg. a salt of formula (I), opt. together with an Al-Cpd. antiperspirant. $C_5H_4NOS_2MYt$ (I) ($C_6H_5NOS)_2$ represents bis(2-pyridyl-1-oxide)disulphide. M=Zn, Fe, Mg, Sn, Cd, Zr, alkali or alkaline earth metals. Y= inorganic or organic anions. t= 1 or 2).

Pref. (I) is 0.05-0.1 wt. % of the compsn. and esp. have MYt = $CaCl_2$, $MgSO_4$, $SrCl_2$, $SrBr_2$, $Ca(NO_3)_2$ or $Ba(NO_3)_2$. Particularly pref. (I) are water soluble.

(I) are antiperspirants at least as effective as known cpds. and also have antimicrobial activity, so that no separate bactericide is required. They also have an antiinflammatory effect so minimise initation caused by convention

-al antiperspirants. Some (I) have already been described as antifungals, antibacterials and antiseptics. 30.3.79 as 025389(6pp1251)

COLG ★ D21 90004 C/50 ★US 4235-874

Dentifrice contg. mixed polishing agents - with small amts. normal calcium pyrophosphate, to improve polishing without increasing abrasion

COLGATE PALMOLIVE CO 11.06.79-US-047600

E33 (E34) (25.11.80) A61k-07/16

Dentifrice compsn. contains 19-85% of an H_2O-insol. prim. polishing agent (I), and 1-10% of a normal Ca pyrophosphate (II). (I) is insol. Na or K metaphosphate, dental grade Ca pyrophosphate, Mg orthophosphate, tri-ca orthophosph-ate, di-Ca phosphate(anhydrons or 2 H_2O) $CaCO_3$, $MgCO_3$ hydrated Al_2O_3, colloidal SiO_2, or equivs. having radioactive dentin abrasion valve 300. (II) has radioactive dentin abrasion valve 1170 in ca 50% aq. slurry.

Compsns. pref. contain 2-5% esp. 3-5%(II) Prefd. (I) are the di-Ca phosphates and insol. Na metaphosphate. Total (I) and (II) content is generally 20-75;% (for creams or chewable tablets), or 70-95%(for powders).

Toothpastes may contain (by wt.)20-79.5% pref. 20-50% liqs. (H_2O and humectants), and 10% pref. 0.5-5% gelling agents. Compsns. pref. also contain (by wt.)0.05-5% of a conventional anionic, nonionic, ampholytic, or cationic surfactant (pref. detersive), esp. an N-acyl sarcosinate (or salt), 0.01-5% pref. 0.05-1% of an antibacterial agent, 0.01-1% of an anticaries agent, and 0.01-5% of flavours and sweeteners, etc. 11.6.79 as 047600 (5pp478)

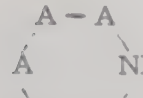
FERO D21 68788 X/37 =US 4235-875

1-Alkyl-piperidines - for treatment of dental caries and periodontitis

FERROSAN 22.04.75-GB-016673

*B03 (25.11.80) *BE-841-001 A61k-07/22 C07d-211/14*

Novel compsns. for the inhibition of dental plaque comprise an alkyl 1-hydroxyalkylpipenidine of formula (I) or its orally acceptable acid addn. salt is associat-ion with an orally acceptable carrier.



Two A and CH_2 and the other CR_1R_2. R_1 is 7C(branched) alkyl. R_2 is H or alkyl. R_1 and R_2 together have 7-14C. R_3 is 2-6C hydroxyalkyl. R_1,R_2 and R_3 together have ≥ 10C.

Pref. R_3 is w-hydroxyalkyl. Pref. R_{1-3} together have 10-15C. Pref. R_1 is n-octyl, n-nanyl or n-decyl. 24.4.78 as 899598(+21.4.76-US-678960)(11pp974)

KAOS D21 66687 B/37 =US 4235-

Shampoo contg. anionic surfactant, alkanol:amide and polyacr acid - with stabiliser added to allow stable dispersion of fine divided powder

KAO SOAP KK 06.03.78-JA-025147

*A96 E16 (A14 E17) (25.11.80) *GB2015-562 +A01n-55/02*

Liq. shampoo comprises 5-30 wt.% of an ammonium- o amino-salt of an anionic, synthetic, organic surfactant, 0.1-1.0 wt.% of a water-soluble carboxy vinyl polymer, 10 wt.% of a 10-14C fatty acid alkanolamide, 1-20 wt.% a stabiliser, 0.001-5 wt.% of a water-insoluble, finely divided powder, an amt. of ammonia or alkanolamine m -tain a pH of 6-8, and a balance of water.

Amino salt is an ammonium-, mono-, di- or triethano amine-, or 2-amino-2-methylpropane-1, 3-diol salt of t surfactant effective for shampooing hair. The stabiliser a 1-3C alkyl monohydric alcohol, 2-6C glycol, or mono-, di- or triethanolamine. The powder comprises water-in -luble shampoo pigments. pearlescent agents, hair or s -lp-treating medicaments or germicides.

Prod. has excellent foaming power, and the powder can be dispersed in a stable condition. 14.2.79 as 012066 (3pp931)

HENK D21 51272 B/28 =US 4236-0

Mono- and di:carboxylic acid 2-hydroxy-alkyl ester(s) - useful water in oil emulsifiers, esp. for cosmetic emulsions

HENKEL KG AUF AKTIEN 22.12.77-DT-757278

*E19 (25.11.80) *GB2011-403 C07c-69/38*

Mono- and dicarboxylic acid esters of 1,2-dihydroxyalkanes of formula $R_1R_2C(OH)-CH_2-OOC-A-COO-CH_2-(OH)CR_1R_2$ (I) and $R_1R_2C(OH)-CH_2-OOC-R_3$ (II) are new. In the formulae A is 1-16C alkylene, 1-8C hydroxyalkylene contg. 4 OH gps, 2-6C alkoxyalkylene, phenylene of 1-12C alkyl-phenylene. R_1 is H or 1-12 C alkyl; R_2 is 10-22C alkyl and R_3 is 1-4C hydroxyalkyl, phenyl-(1-4C)hydroxyalkyl or 1-4C haloalkyl pref. R_1 is H and R_2 is 10-18 C alkyl.

(I) and (II) are useful as emulsifiers in water-in-and emulsions, esp. for cosmetic use. The cosmetic materia can be prepd. easily and inexpensively. 21.12.78 as 972014(6pp964)

See Also

D13 US 4235793 D13 WP 8002501 D23 CH 620099
D23 US 4235805

D22: BANDAGES; DRESSINGS

OREA D22 30213 S/17 =DS 2054-293

Catamerical tampon and holder

L'OREAL SA 07.11.69-FR-038453

*A16 +P32 (A17 A92 A96) (04.12.80) *BE-758-152 +A61f-13/20*

Tampon applicator for use in female hygiene consists of a cylindrical sheath of flexible plastic which contains the tampon and a piston for use to eject it. Tampon is held by bent-over tabs at its open end which open out when the tampon is ejected. At least one, pref. four, inward folds along the length of the cylinder guide and secure the tampon.

Applicator is pleasant to use and requires no narrow tolerances for the mfr. of tampon or applicator. 4.11.70 as 054293(4pp39)

STEF/ D22 55317 A/31 =DS 2703-063

Cellulose and plastics recovery from used sanitary articles - using cutter rolls, high-speed rotor with bars and vacuum extraction

STEFFENS B 26.01.77-DT-703063

*A35 F09 +P41 (04.12.80) *DT2703-063 +B02c-18/44 B02c-23/08 B29g-29 D01g-11/04*

Cellulose and plastic material are recovered from articles rejected during the inspection of napkins, sanitary towels or hospital bed underlays by passing the rejected articles first through a disintegrator consisting of two rotating rolls with cutters. The cellulose is freed thereby as flocks and extracted by a suction system. The plastic foil strips drop in a vertical shaft with a vertical spindle at the bottom, driven in alternate directions by a high-frequency motor. The spindle carries arms on which the plastic is wound up. It is removed from them by scraper blades, pushed in from outside, and removed by suction.

This is a simple device which recovers both cellulose and plastic in a form in which they can be recycled. 26.1.77 as 703063 (7pp39)

DAWI/ ★ D22 88463 C/50 ★DT 2920-47

Bone fracture encircling wire - bears against bone via. distance pieces

DAWIDOWSKI G 21.05.79-DT-920476 (00.00.79-DT-911748)

P31 (04.12.80) A61b-17/18

The encircling wire for bone fractures is particularly for use with a locking device securing the ends. It has distance pieces fixed to it, and by which it bears against the bone.

These pieces can be formed by wire eyes soldered

to the wire, or alternatively glass or plastic beads fixed to it.

The design avoids the risk of bone constriction. 21.5.79. as 920476 Add to 2911748 (4pp160)

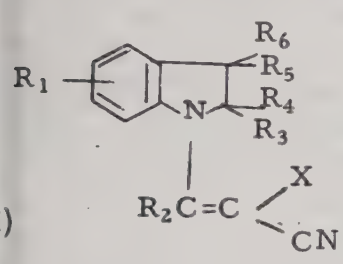
FARB ★ D22 88504 C/50 ★DT 2921-163

Non-yellowing, weather resistant medical casts - comprising web impregnated with tert-nitrogen contg. polyurethane contg. substd. indoline and/or substd. oxalanilide light stabiliser

BAYER AG 25.05.79-DT-921163

A96 E13 P32 P34 (E14) (04.12.80) A61f-13/04 A61l-15/07

Self-hardening material for preparing weather resistant, non-yellowing casts for medical or veterinary use comprises an air permeable, flexible web coated with 50-300 wt.% (w.r.t. web) NCO prepolymer prepd. from aromatic polyisocyanates and tert-N. contg. polyols with a NCO content of 5-30 wt.% and a tert.-N content of 0.01-2.5 wt.% contg. 0.05-3 wt.% (w.r.t. prepolymer) substd. indoline of formula (I) (where R_1 is H or methoxy, R_2 is H or Me, R_{3-6} are H or Me or R_4 and R_5 together form a satd. 6-membered ring, X is cyano, $COOR_7$ or $CONR_8R_9$, R_7 is 1-8C alkyl and R_8 and R_9 are H or Me) and/or substd. oxalanilide of formula (II):



(I)

(II)

where R and R' are 1-15C alkyl or alkoxy and R'' and R''' are H or as R) as light stabilisers.

Casts are non-yellowing, weather resistant and have excellent mechanical properties esp. a balanced ratio between stiffness and elasticity. 25.5.79. as 921163 (24pp)

WEBE- ★ D22 88548 C/50 ★DT 2921-915

Sterilisation of sensitive porous articles - by vacuum and pressure application prior to active agent admission

WEBECKE & CO 30.05.79-DT-921915

P34 (04.12.80) A01n-31/02 A61l-02/20

Materials, esp. heat sensitive porous articles are sterilised in a chamber which is held at a constant low temp., pref. 50-60°C (56°C). A gaseous active agent (formalin) added at a pressure after several vacuum cycles. Both vacuum and pressure lie at the given temp. below the saturation figure for the agent. During the next actuation period, the pressure in the sterilising chamber is raised above the saturation figure.

The method of sterilisation is effective even for porous articles. It is of special merit for the treatment of heat sensitive materials. 30.5.79. as 921915(18pp39)

VICS ★ D22 88661 C/50 ★DT 3019-661

Enclosure for treatment of patients - having feed duct for air with shut/off valve if enclosure becomes damaged

VICKERS LTD 25.05.79-GB-018283

S05 T06 P34 (04.12.80) A61m-16/02 B01l-01/02 G05d-16

Enclosure for patients e.g. with infectious diseases to prevent infection, is formed from flexible material and has inlet and outlet ducts for air with a fan. The pressure or depression inside the enclosure is monitored by the deflection of the wall which controls the opening of a valve in the suction line to the fan.

This controller has a limit switch which detects if a large opening occurs in the enclosure. If it does, a valve on the fan pressure side is closed to prevent air either blowing out or being sucked in.

Used for treatment of humans or animals requiring isolation. Avoids problems of contamination or infection if the enclosure becomes damaged. 22.5.80. as019661 (pp1053)

SARP- ★ D22 88695 C/50 ★FR 2450-059

Aqueous wood protecting fungicidal and insect repelling compsn. - contains at least three fungicides, e.g. penta:chloro:phenol, tri:alkyl tin and thiazoline with resin or acrylic dispersion

SARPAP SOC APPL REC 27.02.79-FR-004949 (20.02.76-FR-004848)

C03 E19 F09 P63 (31.10.80) A01n-09/02 A01n-17/08 B27k-03/50

The parent patent FR2355451 claims a method and biocidal compositions for the protection of wood, in which at least three fungicides having an insect-repellant effect, or opt. with addition of a supplementary insecticide, and contg. a resin fixing agent are used for the external and internal treatment of wood. The present addition uses a solvent comprising or at least contg. water.

The three fungicides are preferably sodium pentachloro-phenate or pentachlorophenol, (this latter usually dissolved in a non water-miscible solvent and dispersed), a trialkyl tin deriv. and a thiazoline deriv. (or its quaternary ammonium deriv.). Other fungicides are metal salts e.g. copper, arsenic, mercury, lead and zinc salts.

Wood protection composition which may be used prevent-atively or to treat affected wood. The use of water improves activity and reduces cost allowing wider usage of the product. 27.2.79 as 004949 (5pp395)

HILL/ D22 21821 B/11 =GB 1581-026

Paediatric arm restraint - of foam-lined plastics sheet wrappable around arm and held by fasteners

HILL E J (HHRE-) 19.09.77-US-834689

*A96 P32 (10.12.80) *US4142-522 +A61f-05/37*

Pediatric arm restraint to keep the elbow straight to protect injection sites etc. consists of a quadrilateral body which is normally flat and is wrapped around the arm to extend from the axilla to the waist. The body includes a non-irritating thin foam cushion which contacts the skin and a sheet of flexible relatively stiff plastics to make the body rigid.

The foam pad is pref. slightly larger than the plastics. Pref. the foam pad is of polyethylene and the sheet is of polypropylene.

The body is shaped to ease formation into a cone. 26.5.78 as 023224, Add. to 1524021. (5pp1376)

LITT D22 14362 A/08 =GB 1581-033

Sponge-like compsn. which releases liquid when under pressure - produced by casting dispersion of thermosetting resin plus rubber, used as ink pad, stamp moistening pads, dressing etc.

LITTLE A D INC 09.08.76-US-712441

*A32 +P75 (A94) (10.12.80) *DT2733-954 B29d-27 B29h-07/20*

Porous shaped body is produced from rubber-like particles, the body being capable of retaining a liq. which can be dispersed upon the application of pressure to the body.

Process comprises (a) forming a soln. of heat-activatable resin binder in a solvent system contg. a solvent for the binder and a softening agent for the rubber-like particles, (b) admixing the particles with the resin binder soln., (c) adding liq.-suspending medium to obtd. particle slurry to form a dispersion in which the resin binder is affixed to the rubber-like particles, (d) introducing the dispersion into a mould having $\geqslant$1 porous wall member, (e) applying pressure across the mould to remove liquids from the dispersion, and (f) heating the obtd. self-supporting shaped body to dry it and cure the resin binder.

Prods. have a high degree of porosity and yet are strong and durable. 8.8.77 as 033086. (8pp924)

MINN D22 83313 Y/47 =GB 1581-162

Disposable, multi-ply, sanitary pad and clothing protector - has porous top ply, absorbent ply, impermeable barrier and adhesive fastening

MINNESOTA MINING CO 22.10.76-US-734747 (12.05.76-US-685769)

*A96 F07 P32 (10.12.80) *DT2721-816 A61f-13/16*

A disposable shield suitable for everyday feminine hygiene and garment protection comprises a thin, elongate highly absorbent pad with (a) a porous planar body-contacting surface, (b) an absorptive portion with different absorptive areas and (c) a soft, pliable, matte-free body fluid imper-

meable barrier. The shield further comprises (d) an adhesive positioner comprising the entire garment contacting surface, preventing dislodgment shift or movement during wear, but enabling removal from garment without damage to the fabric. Pref. (a) is a lightwt. nonwoven web of hydrophobic thermoplastic fibres bound with a resinous fibre. Pref. (b) is a web of polyester and cotton staple fibres in a 1:1 wt. blend.

The shield is for protection against medications and/or daily secretions and discharges of up to 2 cc. of fluid daily. 11.5.77 as 068769. (11pp965)

KEMA D22 91648 A/51 =GB 1581-205

Fungicidal preparations for e.g. wood preservatives - contg. a quaternary ammonium cpd. and a guanidated aliphatic di:amine or poly:amine (SW 4.12.78)

KEMANOBEL AB 10.05.77-SW-005398

*C03 E19 F09 P34 +P63 (10.12.80) *DT2820-409 +A01n-33/12*

Compsn. for control of wood-destroying fungi comprises (a) a quat. ammonium cpd. contg. ⩾1 higher aliphatic gp. having 6-24C attached to N; and (b) a guanidine component consisting of a guanidated aliphatic diamine or polyamine, or its acid addn. salt, and being of formula $X\text{-}HNR_1\text{-}(NX\text{-}R_2)_n\text{-}NH\text{-}X$ where X is H or carboxamidine, opt. substd. with 1-4C alkyl, R_1 and R_2 being 3-14C aliphatic gp. and n is 0-6. Wt. ratio of (a):(b) is 1:2 to 20:1.

Mixt. gives a prolongation of action and also a synergistic widening of fungicidal activity. 10.5.78 as 018830. (7pp963)

GLAS/ ★ D22 88747 C/50 ★GB 1581-329

Hydro:fluosilicic acid salts of long chain amines - useful in disinfectant and bactericidal compsns.

GLASBY A G S 29.12.75-GB-053038

E11 (10.12.80) A01n-33/04 C07c-91/06

Salts (I) of H_2SiF_6 (II) and an amine (III) contg. an N-(opt. substd. ⩽8C aliphatic) gp. are new.

(III) may be a prim., sec., or tert. amine; may be a diamine; and pref. has the N-aliphatic gp. as a satd. hydrocarbon. Esp. prefd. (III) are alkoxylated amines.

(I) may be formulated into useful, effective, and inexpensive disinfectant and bactericidal detergent compsns. In addn., (I) have low mammalian toxicity and irritancy, and in use are resistant to contamination by organic materials. 29.3.77. (6pp478)

METB D22 11000 C/06 =GB 1581-356

Communal waste disposal system for hospital - uses central incinerator and vacuum conveying of waste comminuted in individual receiving units

METAL BOX CO LTD 01.04.77-GB-013780

*+P41 (10.12.80) *US4185-973 +B02c-18/40*

Waste disposal system consists of at least one enclosed shredder, a treatment appts. to treat the chopped waste, and a discharge valve between each shredder and the treatment appts. which is ta least partially closed when the inlet for the shredder is open. The chopped waste is sucked into the treatment appts. The treatment appts. has an air inlet.

Pref. the shredders are connected in series.

Suction power is maintained no matter how inlets of the system are open. 1.4.77 as 013780. (13pp1376)

CONO ★ D22 88752 C/50 ★GB 1581-428

Direct alkylation of phenol(s) - with n-alkanol(s) and alumina catalyst, to give normal-alkyl side chain prods.

CONOCO INC 13.03.78-GB-009860

B05 C03 (10.12.80) C07c-37/16 C07c-39/06

Alkylated phenols (I) contg. mainly n-alkylated side-chains are prepd. by the direct alkylation of a phenol (II) with a 4-10C n-alkanol (III) at 200-400°/⩾20 atmos. in the presence of an Al_2O_3 catalyst derived from the hydrolysis of an Al alkoxide. (II) is resorcinol, PhOH, isomerised xylenol, hydroquinone, or o-, m-, or p-cresol.

Direct, single stage reaction may be effected on a continuous basis, and avoids the use of toxic, expensive, and corrosive materials. In addn., the use of an expensive and polluting Zn/Hg amalgam is avoided. Certain (I) are antiseptics and anthelmintic agents. 13.3.78 as 009860. (5pp478)

PROC ★ D22 88809 C/50 ★J5 5108-35

Water absorbing foamed material for tampons etc. - comprise hydrophilic foam e.g. polyester, coated with absorbent cove material

PROCTER & GAMBLE CO 29.11.78-US-964842

A96 +P32 (20.08.80) A61f-13/20

The structural material comprises a foamed hydrophilic structural material on which top surface, a material having improved hydrophilic and absorptive nature is adhesively coated. The hydrophilic foamed structural material is polyester foamed material or polyurethane foamed material. The adjuvant material having improved hydrophilic and absorptive nature is a fibrous material such as cellulose fibres having an average length of ⩾1.0 mm and a dia. of 15-45 μ.

The foamed, absorptive material is used as a padding material to woman's mentruation. 29.11.79 as 154942 (11pp15)

NODP ★ D22 88819 C/50 ★J5 5117-61

Prodn. of plywood impregnated with insect control agent - contg. nitrogen-contg. base reactive with aldehyde given off by adhesiv used in mfr. of plywood

NODA PLYWOOD MFG KK (DAIL) 03.03.79-JA-024929

A81 C03 F09 P63 (10.09.80) B27k-03

Prodn. of plywood is described in which an insect pest control soln. contg. a nitrogen-contg. base, e.g., ethylamine, diethylamine, triethylamine, methylamine, ethanol-amine, etc., and a boron cpd. eg., boric acid, borax, etc., is coated on the surface of a plywood, mfd. by laminating wood single plates with the aid of an adhesive giving off free aldehyde when heated, during the time when the adhesive layer is heated at a temp. high enough to give off free aldehyde present in the adhesive in such a way that the free aldehyde can react with the nitrogen-contg. base inside the plywood.

The method can impart a great insect pest control effect to the plywoods with high efficiency by a simplified and highly safe method without the necessity of a formalin odour-removing process. 3.3.79 as 024929 (5pp117)

DAIW- ★ D22 88833 C/50 ★J5 5137-17

Ink compsn. for marking of skin - comprises e.g. an alcohol, edibl colouring agent, opt. cellulose derivs., and glycerol to contro drying velocity

DAIWA MARCANT KOGYO 12.04.79-JA-045189

A97 E17 G02 (D13) (25.10.80) C09d-11

Ink compsn. containing (1) ⩾1 of ethyl alcohol, isopropyl alcohol, n-propyl alcohol and/or water as solvent; (2) ⩾1 of glycerine, propylene glycol, polyoxyethylene (deriv) and/or polyoxypropylene (deriv.) as controlling agent; (3) edible colour element of low toxicity; and opt. (4) ⩾1 of cellulose derivs., dextrin and amylose, as auxiliary controlling agent.

(2) controls the drying velocity and viscosity of the ink and thereby prevents excessive drying of the ink and fixes the colour element of the ink to skin, etc. The amt. of (2) is 1-10 wt.% of the compsn. In an example, red ink was prepd. from 9.9 pts. of Red No. 3, 3.3 pts. of Red No. 10, and 3.3 pts. of Yellow No. 4, 66 pts. of propylene glycol as food additive, 33pts. of glycerine as food additive, 183 pts. of distilled water, 35 pts. of ethyl alcohol and 16.5 pts. of β-cyclodextrine.

Used for marking at the time of surgical operations or marking of fruits and vegetables. 14.2.79 as 045189 (4pp)

KAOS ★ D22 88845 C/50 ★J5 5137-20

Disposable napkin comprising three layer pad - and fastening tape with pressure sensitive adhesiVe comprising rubber elastomer terpene-phenol resin and liq. rubber

KAO SOAP KK 12.04.79-JA-044581

A96 G03 P21 (A81) (25.10.80) A41b-13/02

The napkin comprises a pad assembly consisting of a top

eet, an intermediate absorptive layer and a back sheet, pe fasteners are fitted at upper end positions of the pad sembly and are coated with a pressure-sensitive tackify g material contg. terpene-phenol resin, as tackiness justing agent. The pressure-sensitive tackifying mat-ial consists of 100 wt. pts. rubber elastomer, 45-570 wt. s. terpene-phenol resin and 8-130 wt. pts. liq. rubber. The top sheet which contacts human skin is a liquid per neable porous sheet, e.g. a non-woven fabricated sheet ntg. a large amt. of hydrophobic fibers and having a . of 20-50 gram/m^2. The back sheet is a liquid imper-eable sheet, e.g. a polyethylene sheet of low density -50 u thick and contg. 3-5 wt. % titanium dioxide. It is eated with an embossing processing procedure. A poly-opylene film may also be used. The intermediate layer chosen from a water absorptive paper or paper having midity resistance or a cotton like pulp sheet.

The napkin can be tightly fixed onto a baby's body with e tape fastener. 12.4.79 as 044881 (4pp15)

ITR ★ D22 88849 C/50 ★J5 5137-210

erilising fibre for socks, insoles etc. - has copper ion linked to ion xchange gp. in surface layer of e.g. polyamide fibre

MITSUBISHI RAYON KK 05.04.79-JA-041401

A94 F01 P32 P34 (A18 A28 A60 F06) (25.10.80) A61f-13/06 A61l-15 D01f-06/18

opper ion is linked to ion exchange gp. in the surface yer of fibre with ion exchanging capacity and water in-luble copper cpd. such as copper suboxide, copper ide and copper hydroxide is formed from the copper ion that it may be contained in the surface layer of the re.

The fibre include acrylic, polyamide, polyester, poly-efin, PVC, and phenolic fibres, among which most pref. acrylic fibre contg. 25-2500, pref. 100-2000 mmol/Kg carboxyl gp. in the surface layer which occupies 40, ef. 20% of crosssectional area of the fibre. For linking copper ion, the ion exchange gp.-contg. fibre is treated th water soln. of copper sulphate, copper chloride, etc.

The fibre shows durable sterilising effect which stands peated washing and is useful for socks, insole, fishing t, rope, etc. 5.4.79 as 041401 (4pp172)

WC ★ D22 C/50 ★J5 5139-425

d. of poly:oxazoline(s) or poly:oxazine(s) and poly:halide anion - hygiene applications

DOW CHEMICAL CO 16.04.79-US-030396

A96 (31.10.80)

4.80 as 048804

EI- ★ D22 89293 C/50 ★J5 5139-480

at generating agent for moulding in sheet - used for medical plications e.g. hot bandages

SOEI KK 18.04.79-JA-047565

A97 G04 P32 (31.10.80) A61f-07/08 C09k-05

e heating agent contains (A) a wetting properties-control ng agent. The heating agent is produced by mixing (B) bstance to be oxidised with (A) or building up (A) on (B). e heating agent is produced by mixing (A) with (C) an dising agent. (A) is pref. a surfactant.

Since the surface of the metal powder as (B) becomes drophobic, the heating agent evolves heat for a long time also has markedly improved storage properties. The ating agent can be moulded in a sheet and has medical es, e.g. hot bandage, heating band, etc.

In an example, a heating agent was prepd. by treating n with 0.5% silicone resin (w.r.t. the iron powder) and n mixing 44% of the treated iron powder, 27% of activat-carbon fibre, 5% of filler, 4% of oxidn. catalyst and 20% water. After the heating agent had been stored for 400 ws, of if attained 50°C within 75 mins. followed by hold-g around 68°C for 23 hrs. 18.4.79 as 047565 (3pp90)

IPO D22 58258 T/37 =J8 0044-727

ylactides and medicaments compsns - for local application of dicinal film on skin,wounds,burns etc

DU PONT DE NEMOURS CO 23.02.71-US-118081

*A96 B07 (13.11.80) *DT2207-635 A61k-09/12.+A61k-47*

Compsns..contain at least one medicament in combination with a polymerisate consisting of repeating units of gen. formula (I):- $(R)_m$-CR_1R_2-CO-O- where R = lower alkylene (max. 6C), m = 0 or 1, R_1 = H or lower alkyl (max. 6C), R_2 (when m = 0), =H or alkyl (max.22C), when = 1, H or alkyl (max. 6C), and min.40% of the polymerisate consists of repeating units: a) -$CHCH_3$-CO-O derived from lactic acid, or b) -$CHCH_3$-CH_2-CO-O derived from β-hydroxybutryic acid.

The medicament is present at 0.01-90% and the polymerisate at 99.99% to 10%. The polylactide forms the matrix which slowly releases the medical agent. The matrix is slowly hydrolysed and liberates the agent while being slowly resorbed itself. The film may be washed off with warm water when required. 22.2.72 as 017758 (clg.23.2.71-US-118081) A61k-47/00, 9/12 (13.11.80) DU PONT & CO. E.I. (9pp) (J4702328)

NIPC D22 95133 X/51 =J8 0044-800

Methyl 2-benzimidazole carbomates, broad spectrum fungicides - giving stable long lasting activity and which are nontoxic to humans

NIPPON CHEM IND KK (NICH-) 17.09.74-JA-106022

*A60 C02 P63 (14.11.80) *J51125-744 +A01n-25/02 C14c-03*

A fungicide contg. methyl-2-benzimidazolecarbamate and/or a salt thereof, as active ingredient, is effective against a wide range of microorganisms such as the genus Penicill-ium, genus Mucor, Genus Aspergillus, genus Rhizopus, genus Chaetomium, genus Spicaria, genus Cladosporium, As the active cpds. are stable, the activity of the fungicide lasts for a long period.

The fungicide can be applied by dipping, spraying, draw-ing, impregnating, incorporating and is useful as a fungic-ide for plastics, electric goods and leather goods. It is non-toxic to humans. 17.9.74 as 106022, C14c-3/00, A01n-25/02 (14.11.80) NIPPON CHEM. IND. KK (4pp)(J51125744)

OSHI- D22 60517 B/33 =J8 0045-361

Bleaching method for wood, board etc. - using soln. contg. hydrogen peroxide and chlorite

OSHIKA SHINKO KK (OHSH-) 13.12.77-JA-148881

*C03 E36 F09 P63 (18.11.80) *J54084-008 B27k-05/02*

Bleaching of wood, thick board or rectangular timber com-prises immersing wood in a bleaching soln. contg. H_2O_2 2-15 wt % and chlorite 1-13 wt % (where the chlorite concn should be lower than H_2O_2 concn.) and heating it under reduced pressure.

Wood can be bleached while keeping good contrast be-tween spring and autumn woods and by heating the wood in the bleaching soln. under reduced pressure, the bleaching can be practiced uniformly to as deep as ca. 20 cm. By controlling the bleaching conditions, the degree of contrast the bleaching degree, the bleaching depth, etc. can be re-gulated freely. 13.12.77 as 148881, B27k-5/02 (18.11.80) OHSHIKA SHINKO KK (3pp) (J54084008)

DAIL D22 41285 B/22 =J8 0045-521

Non-medical fungicide and antibiotic - contg. as active component 2-hydroxyalkyl glycol ether

DAICEL KK 26.09.77-JA-115823

*B05 C03 E17 (18.11.80) *J54049-322 +A01n-31/02*

Nonmedical fungicide and antibiotic contains as active com-ponent 2-hydroxyalkylglycol ether of formula: $C_nH_{2n+1}C(OH)HCH_2(OCH_2CH_2)_mOH$ (I) (where n is integer 6-12, and m is integer 1-3).

(I) has the uses in non-medical fields such as general industrial products, cosmetics, agricultural crops and food. (I) is effective, e.g. to Ps.fluorescens, Staphylococc-us aureus, Bacillus subtilis, yeast, Aspergillus niger, Penicillium citrinum. Ether of diethyleneglycol is partic. effective. Further.ether having 2-hydroxyalkyl with 8-14 carbon atoms shows the excellent effect.

(I) is prepd. by reacting 1,2-epoxyalkane with ethylene-glycol, diethyleneglycol or triethyleneglycol, or by react-ing 1,2-alkanediol with ethylene dioxide. 26.9.77 as 115823 A01n-31/02 (18.11.80) DAICEL KK (3pp) (J54049322)

UYFL- D22 78321 A/44 =US 4234-972
Metal-coated biologically active glass - used to make artificial implant useful in orthopaedics and dentistry
UNIV FLORIDA BOARD REGEN 19.05.77-US-798671 (21.06.78-US-917646)
*L01 M13 P33 + P32 P42 (25.11.80) *BE-866-323 A61f-01/24*

Prosthesis or surgical implant suitable for cement-free bonding to bone, consists of a metal substrate of sufficient strength coated at least on the portions to be bonded to the bone, with a coating of 0.2-2mm thickness of a biologically active glass or glass-ceramic of uniform compsn. and ther-mal coefft. of expansion, and free of flaws resulting from the release of thermo-mechanical stresses.

The surface of the substrate at its interface with the glass coating is roughened to a degree sufficient to increase the surface of the substrate without permitting mechanical interlocking between the substrate and coating. The surface of the substrate is also oxidised. The coating is bonded to the substrate by ion diffusion at the interface.

The thermal coefft. of expansion of the substrate and the glass(ceramic) coating are different for extremely strong implants. 21.6.78 as 917646 Div ex. 4159358(7pp924)

KELD/ ★ D22 89835 C/50 ★US 4235-177
Lock-stitch suturing machine with oscillating curved needle - and loop arm driven from single shaft via lost motion
KELDER C 23.02.79-US-014706
F05 S05 (25.11.80) D05b-01

Curved suturing needle is attached to a shaft which is rotat-ionally oscillated via a crank. A loop arm for temporarily holding loops of a lock stitch is mounted on the shaft adjacent the needle and is rotated via a lost motion linkage.

The lost motion allows the needle point to move beyond the loop arm and return past it at each end of its stitching cycle. This motion enables the needle to pass through loops of suture retained by the loop arm.

Machine sutures humans, animals and corpses. Stitching action is preformed by a compact mechanism. 23.2.79 as 014706(7pp295)

MESP ★ D22 89840 C/50 ★US 4235-228
Unitary orthopaedic cast material - with inner plaster layer and surrounding padding and covering layers of hydrophobic material
MEDICAL SPECIALITIES INC 27.07.79-US-061371
A96 P32 (25.11.80) A61f-05/04

A unitary, pre-padded orthopedic cast material comprises an inner layer of plaster-splint material. A thick padding layer of a hydrophobic textile overlies at least one side of the plaster splint layer. A covering fabric comprising a hydrophobic textile enclosing both the splint and padding layers.

Pref. both the padding layer and covering fabric consist of a non-wetting polymeric material. In the case of the padding layer this material is non-woven but the covering fabric is of a resilient omitted construction.

The cast material can be quickly applied to a broken limb. The cast wicks moisture away from the skin of the wearer to reduce the heat beneath the cast and alleviates skin irritation and odour. 27.7.79 as 061371(6pp295)

JOHJ ★ D22 89845 C/50 ★US 4235-237
Absorbent article - has open weave scrim with water insoluble but swellable particles enveloping scrim element intersections
JOHNSON & JOHNSON 08.05.78-US-904056
P32 (25.11.80) A61f-13/16

An article e.g. a disposable diaper or sanitary napkin, comprises a woven scim forming an open network of fibrous elements, and discrete water-insol. but water-swellable particles integral with the scrim at the intersections. The particles are on and partially envelop the elements.

The particles are e.g. of crosslinked polyacrylamides and/or sulphonated polystyrenes, or polyalkyleneoxides and their alkyl-substd. phenyl ethers, or various maleic acid copolymers. The particles are formed e.g. by contacting scrim with polymer in a carrier liq. to form adherent droplets, then evaporating the liq. 8.5.78 as 904056(10pp

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ANPR- D22 05974 C/04 =US 4235-
Chlorine based sterilising soln. contg. phosphate buffer - to red corrosion and tissue irritation, pref. stored in compartmer package
ANPROSOL INC 12.07.78-US-924018 (23.03.79-US-023495)
*E34 S03 + P34 Q34 (E33) (25.11.80) *GB2025-229 B65d-81 B65d-85 G01n-21/06 G01n-31/22*

A package for mixture components, particularly for ste izing solution for medical articles, comprises superpo plastics film layers heat-sealed at their edges to form mpartments mutually sealed from each other. A colour indicator in at least one compartment changes colour wh mixed with a component from another compartment to dicate internal leakage before use and provide a visual integrity check.

One compartment may contain a chlorine solution, ase ond phosphate, and a third non-ionic surfactant, the ind -ator being chlorophenol red or sodium chromate added at least one component. 23.3.79 as 023495 Div. ex. 9240 of 12.7.78(16pp1358)

PROC D22 61820 B/34 =US 4235-7
Liq. cleaning compsn. with high storage stability - comprising paraffin sulphonate, hypochlorite, alkaline salt and water
PROCTER & GAMBLE CO 08.02.78-US-875954
*(25.11.80) *EP---3-625 + C11d-07/56*

Aq. false-body hard-surface scouring cleanser consists (a) 0.2-5 wt.% of bleaching agent which yields hypochlor ion in aq. soln, (b) 1-30 wt.% of inorganic colloid formi clay selected from smectites and attapulgites, (c) 0.1-5 % of paraffin sulphonate surfactant of formula RSO_3M (wh R is prim. or sec. 8-22C alkyl and M is alkali metal), (d) 5-60 wt.% of insol, particulate abrasive material which has particle dia. 1-250u and S;G. 0.2-5.0, (e) 2-15 wt.% inorganic alkaline buffer salt capable of maintaining pH a 10.0-14, and (f) 10-90 wt.% of water.

The cleanser has excellent storage stability. 8.2.78 a 875954(5pp977)

FARB D22 68416 B/38 =US 4235-77
Heterocyclyl-carbonylamino-acetamido-penicillin derivs. - useful broad-spectrum antibacterials, e.g. as animal growth stimulants
BAYER AG 08.03.78-DT-810083
*A60 B02 C02 (25.11.80) *EP---3-992 C07d-499/70*

Novel penicillin derivs. are of formula (I) or their esters salts or carboxyl protected derivs.

(I)

R is H or alkoxy. B is opt. substd. furyl, pyrrolyl, py -zolyl, imidazolyl, tri-or tetr-azolyl (is)oxazolyl, oxaliaz olyl, (iso)thiazolyl, 2-imina-Δ4-thiazolin-4-yl, thia di(or tri)azolyl, oxtriazolyl, sydnanyl, pyridyl, pyridazinyl, pyri-midinyl, triazinyl, tetrazinyl or pyranyl A is ethylene, tri methylene or o-phenylene. D is CO or a direct Z is H or specified aliphatic, aromatic. alicyclic or heterocyclic g

Specifically claimed cpds. include sodium 6-α-(2-oxo imazolidin-1-yl)-carbonylamino - furyl-2-acetamido - pe -icillinate.

Cpds. are antimicrobials, animal growth promoters a feedstuff utilisation improving agents. 12.2.79 as 011347 (13pp974)

RYDE- ★ D22 89989 C/50 ★US 4235-84
Contact lens disinfection - with timed heater block and mechanico counter displaying number of disinfection cycles
RYDER INT CORP 27.10.78-US-955392
S05 X25 P34 (25.11.80) A61l-02/04 H05b-01

Contact lenses are sterilised by placing in a soln. which i heated electrically for a predetermined period. A bimetal -ic strip is flexed by the heating cycle and indexes a mech -anical counter. The counter records the number of ster ilisation cycles completed. Pref. the counter includes a second set of displays which are exposed when the strip i

ot to warn the user that sterilisation is in progress.
The appts. sterilises contact lenses esp. of the soft ype. Repeated sterilisation of soft lenses tends to solidi- y absorbed proteinaceous material. The counter shows he number of sterilisation cycles conducted and alerts he user of the need to employ an enzyme cleaning soln. to remove the proteinaceous material. 27. 10. 78 as 955392 (9pp295)

ALK/ D22 70288 B/39 =US 4235-884
VP-halogen complex prepn. as stable aq. soln. - by reaction in low oiling solvent which is displaced by warm water; used as ntiseptics, germicides, bactericides etc.
SALKIN N 17.03.78-FR-007797
*A96 C03 +P34 (A14) (25.11.80) *DT2910-205 A61k-31/79 A61k-33/18 C07d-207/44*

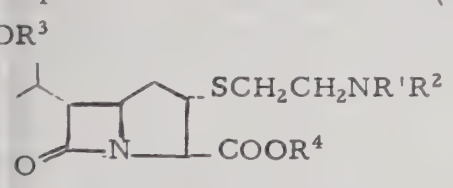
Prepn. of a stable aq. soln. of a complex of halogen and olyvinylpyrrolidone (PVP) comprises (a) dissolving chlor- ne, bromine or iodine in a soln. contg. PVP, the solvent sed having a 6. pt. lower than that of water, being insolu- le in water, and forming no azeotrope with the latter;(b) eating the soln. to react PVP with the halogen; and (c) the olvent is displaced by adding water at a temp above the olvent b. pt.
Pref. the halogen is iodine and the solvent is methylene hloride; the PVP and I_2 is heated in a closed vessel to 60- 5°C; soln. is cooled to 40-42°C; the methylene chloride s then displaced by water at 42-44°C.
The solns. are used as germicides and bactericides. .3.79 as 017197(3pp963)

IITN D22 05746 C/04 =US 4235-891
)-Poly:haloalkyl-O,S-di:alkyl phosphono:thiolate derivs. - useful as nsecticides, acaricides and nematocides
NIHON TOKUSHO NOYAK 05.07.78-JA-080934
*C01 (25.11.80) *EP---7-020 A01n-57/10 C07f-09/16*

)-alkyl-S-alkyl-O-haloalkyl-phosphates of formula $R_1O)R_2S)P(O)-O-CH_2-CF_2-Y$ are new where R_1 and R_2 are --4C alkyl and Y is 1-4C haloalkyl.
Specifically claimed are O-ethyl-S-n-propyl-0-2, 2, 3, 3 tetrafluoro-1- propylphosphorothiolate; and O-ethyl-S-n- ropyl-0, 2, 2, 3, 3, 3-pentafluoro-1-propylphosphorothiolate
Cpds have arthropodicidal(insecticidal and acaricidal) nd nematocidal activity. They may be used in plant prote- tion, protection of stored goods, against pests causing ygiene problems and in veterinary mediane. 27. 6. 79 as 52632(8pp963)

ERI D22 80170 A/45 =US 4235-917
Substd.-N-acyl-thienamycin derivs. - useful as antibiotics, sinfectants, bactericides, medicaments and animal feed additives
MERCK & CO INC 05.05.77-US-793974
*B02 C02 (D13) (25.11.80) *BE-866-660 A61k-31/40 C07d-487/04*

-alkyl-N-acyl derivs. of therenamycin of formula (I) and ceptable salts are new. In (I), R' is lower alk(en)yl or benzyl; R^4 is H, Me, t-but -yl, phenacyl, p-bromeph -enacyl, pivolaxymethyl, 2, 2, 2-trichloroethyl, alloy 3-methyl-2-butanyl, 2-methyl-2-propenyl, benzyl tenzhydryl, p-tert. butylbenzyl, phthalidyl, phenyl, 5-indanyl, acetylthiomethyl, acetoxymethyl, propionyloxymethyl, meth -alyl, 3-butenyl, 4-penkenyl, 2-butenyl etc. R^3 is H, lower alkyl or lower alkanoyl; and R^2 is formyl, lower alkoxy ca -rboyl, benyoyloxycarbonyl, lower alkenylcarbonyl, lower alkynoyl carbonyl or lower alkonoyl which may be opt. substd.



(I) are antibiotics for use in human and animal therapy and is inanimate systems. A specific cpd. is (I), where R' is Me, R^2 is acetyl, R^3 is H and R^4 is H. 5. 5. 77 as 03974(23pp964)

MERI ★ D22 90038 C/50 ★US 4235-967
Prodn. of antibiotics 890 A1 and 890 A3 - by cultivation of Streptomyces flavogriseus NRRL 8139 and 8140
MERCK & CO INC 06.04.79-US-027642 (21.11.75-US-634300)
B02 C02 (D16) (25.11.80) C12p-17/18

Prodn. of antibiotic 890A, involves cultivating a strain of Streptomyces flavogriseus NRRL 8139 or 8140 in a nutri- ent medium under submerged aerobic conditions. With NRRL 8139 a mixt. of antibiotics 890A, and A_3 may be obtd.
Antibiotics 890A, and A_3 are isomers and are β-lactam antibiotics as described in U.S. 4162324(Der. 59765B), are broad-spectrum antibacterials useful as therapeutic age- nts, animal feedstuff additives, preservatives for food. disinfectants and industrial bactericides e.g. for use in water-based paints and in the white water of paper mills. Dose is 2-600mg/kg daily. 6.4.79 as 027642 Div. ex. 4162324(21pp1248)

MEDL/ ★ D22 90094 C/50 ★WP 8002-369
Device for closing body passages, esp. for use as contraceptive - comprises swellable inert material with retaining element to press against the body wall
MEDLINE AB 04.05.79-SW-003886
A96 P32 (13.11.80) A61f-05/42 A61f-13/20
D/S: N(AU, BR, CH, DT, DK, GB, JA, NL, NO, OE, US) + E (CH, DT, FR, GB, NL, OE).

A device for (temporarily) closing a body passage or cavity comprising a portion (2) of inert material which swells by ⩽20% by absorbing body fluids also his a retaining element (7) with wing-like projections (8) which anchor the device before it swells sufficiently to be retained by pressure against the body wall.
The device is useful for treating eg. phlebectasis or enlargement of cerbral arteries and esp. for use as a contraceptive device by closing the oviducts ot testicular ducts.
5.5.80 as 000130 (16pp949).
(E) ISR:- SW7608618; US3220960.

See Also
D15 DS 2407922 D25 DS 2406965

D23: OILS; FATS; WAXES

M ★ D23 88421 C/50 ★CH-620-099
ert. butyl-cyclohexyl methyl-carbinol as perfume - and omatising component, e.g. for soaps and detergents
FIRMENICH SA 06.05.77-CH-005690
E15 (D13 D21 D25) (14.11.80) A23l-01/23 A61k-07/46

e use of 3-tert butylcyclohex-1-yl methylcarbisiol (I), . in admixture with the corresp. 4-tert. butyl isomer (II), as a component of perfume and aroma

(I)

compsns. is new. Pref. mixts. contain ⩾50% (I).
(I) has olfactory properties distinct from (II) (which resembles sandalwood) e.g. it has an intense and persistant, rooty, earthy, green and woody odour. It is useful in soaps, detergents, cosmetics etc. and for enhancing the taste of certain fruits, e.g. grapefruit in yoghurt, jams etc.. or in pharmaceutical or tobacco products.
6.5.77 as 005690 (4pp1251).

UNIL D23 58674 S/36 =DS 2110-213
Fatty acid diglyceride prepn
UNILEVER NV 06.03.70-GB-010869
*E17 (04.12.80) *BE-763-889 C07c-69/30*

Stearic and palmitic acid diglycerides are prepd. by reacting glycidylpalmitate and/or stearate with palmitic and /or stearic acid at 50-180°C pref. in a polar organic solvent in the presence of 0.005-0.3 moles, per mole of glycidyl ester, of a quat. onium salt of an inorganic acid or of a 1-22C fatty acid as catalyst. Suitable catalysts include cetyltrimethylammonium bromide and cetylpyridinium bromide.

Catalyst shortens reaction time and improves the purity of the prod. 3.3.71 as 110213(6pp068)

HLSI- D23 30222 X/17 =DS 2552-311
Edible liquid oil prodn. - from natural oils contg. approximately equal molar proportions of satd. and unsatd. fatty acids
HLS LTD IND ENG CO (HLSL-) 22.11.74-IL-046106
*(D13) (04.12.80) *BE-835-832 C11b-07 C11c-03/10*

Edible oils are obtd. from vegetable and/or animal oils of the type of palm oil by interesterification and fractional distn. The process involves (a) interesterifying a part of the initial oil with one or more esters of a 1-3C alcohol with one or more unsatd. acids; (b) the mixt. from (a) is distilled at below 53.2 mbar. to obtain a first residue of edible oil with a higher iodine number than the initial oil and a distillate of alcohol esters of (un)satd. fatty acids which is (c) fractionally distilled at below 53.2 mbar to obtain a lower boiling fraction (I) (satd. esters); (d) fraction (I) is interesterified with further amts. of initial oil and the resulting mixt. distilled at below 53.2 mbar to botain a sec -ond residue of edible oil with a lower iodine number than the initial oil and a second distillate of alcohol esters of (un)satd. fatty acids which is (e) fractionally distilled at below 53.2 mbar to obtain a lower boiling fraction (I) (satd. esters) and a higher boiling fraction II (unsatd. esters) Both fractions (I) are added to interesterification (d) and both fractions (II) are added to interesterification (a). 21.11.75 as 552311 (10pp068)

UNIL D23 74334 X/40 =DS 2609-705
De-waxing triglyceride oils - by adding a strong acid or anhydride, followed by water and removing the sludge obtd. (BE100976)
UNILEVER NV 10.03.75-GB-009862
*C03 E17 (D13) (04.12.80) *DT2609-705 C11b-03/04*

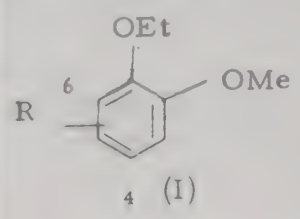
Purifcn. of triglyceride oils which are liquids at 40°, com -prises treatment with acid or anhydride (which exhibit pH 0.5 in aq. solns. of concn. 1 mole/dm^3 at 20°) in aq. soln. (>10 wt.%), or with HOAc (100%); the resulting mixt. is dispersed with water (0.25-5 wt.%) and after standing at temp. 40° the aq. suspension is removed. Pref. citric acid (0.001-0.5 wt.%, as dry acid) is used. The mixt. of oil, acid and water may also be heated to 60-90° for a short time and then centrifuged. 9.3.76 as 609705 (12pp047)

UNIL D23 36723 Y/21 =DS 2651-761
Refining glyceride oils, esp. for use in salad oils or margarine - by filtration through a semipermeable membrane before an adsorption process (NL 17.5.77)
UNILEVER NV 13.11.75-GB-046893
*(D13) (04.12.80) *DT2651-761 C11b-03/10*

Crude glyceride oil, e.g. soyabean oil is refined by cont-acting a soln. of the oil in a non-polar organic solvent esp. hexane, with a metal oxide or metalloid oxide adsorb -ent in a column. Adsorbent is pref. Al_2O_3, SiO_2 or SiO_2 gel. Before or after treament with adsorbent the soln. of the oil is contacted under pressure with a semipermeable membrane to separate substances of varying mol. wt. so-lvent is removed to recover the refined oil from at least one of the resulting fractions. 12.11.76 as 651761 (10pp)

HAAR ★ D23 88500 C/50 ★DT 2921-1
Iso:camphoryl guaicol ethyl ether derivs. - useful as intermedio for the sandalwood component iso:camphoryl cyclohexanol
HAARMANN & REIMER GMBH 25.05.79-DT-921139
E14 (04.12.80) C07c-43/21

Guaiacyl ethers of formula (I) are new: (R is an iso-camphyl-5 gp. at either the 6- or pref. the 4-position



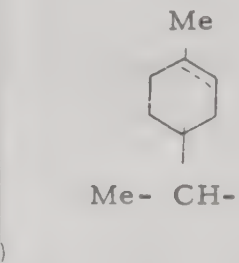
(I)

They are made by alkylating the alkali metal salt of 6- or 4- (isocamphyl5)guaicol (II) with an ethyl halide or diethyl sulphate (DES).

(I) are useful in prodn. of 3-(isocamphyl- 5) cyclo-hexanol (III) which is an essential component of sandal-wood extracts. Yields of (III) of up to 85% based on (II) can be achieved and the starting materials are much chea per than those used in known processes. 25.5.79. as 921139 (9pp1251)

RUHR ★ D23 88533 C/50 ★DT 2921-61
2-Methylene-butanal derivs., useful as perfumes - contg. 4-methy 3-cyclohexenyl or 4-methyl cyclohexyl gp. in 3-position
RUHRCHEMIE AG 28.05.79-DT-921619
E15 (04.12.80) C07c-47/22

2-Methylene-3-(4-methyl-3-cyclohexenyl)butanal (I) and 2-methylene-3-(4-methylcyclohexyl)butanal (II) are new, and are useful as perfumes with characteristic fra-grance notes different from commercially available per-fumes.



(I) is prepd. by reacting 3-(4-methyl-3-cyclohexenyl)-butanal (III) with HCHO or an HCHO forming cpd. at 60-120°C in the presence of a catalytic amt. of a sec. amine (II) is prepd. similarly after partial hydrogenation of (III) to form 3-(4-methyl-cyclohexyl)butanal (IV). The catalyst is an enamine, pref. the enamine from di-n-butylamine and (III) or (IV). 28.5.79. as 921619 (7pp367)

UNIL D23 07744 A/04 =GB 1581-33
Perfume compsn. with colour indicator - to indicate exhaustion o perfume
UNILEVER NV 02.07.76-GB-027683
*S03 P34 (10.12.80) *NL7707-354 +A61k-07/46*

Colour change perfume system includes a reactive com-ponent which changes in contact with the atmos., an indica tor adapted to change colour in response to changes in the reactive component and a perfume chosen to pass into the atmos. at a selected rate. The reactive component and perfume are such that the indicator changes colour when the perfume is effectively exhausted.

Pref. the reactive component is HCl, CH_3COOH, or an amine or alkali which reacts with CO_2. Typical applica-tions are in air freshener and perfume sources. 1.7.77 (7pp393)

ASAE ★ D23 88840 C/50 ★J5 5137-18
Stabiliser for fat and oil - contains tocopherol and sterol
ASAHI DENKA KOGYO 20.03.79-JA-033107
E13 (25.10.80) A23d-05/04 C09k-15/34

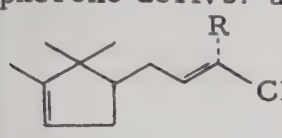
Stabiliser for fats and oils comprises mainly a fraction contg. (1) tocopherol and (2) sterol in a wt. ratio of 0.3 component (2) /component (1) 1 obtd. by molecular distn. of vegetable oil-deodorised scum.

Pref. the fraction comprises 24-28% of tocopherol, sterol and fat and oil component. The deodorised scum of bean oil or cotton seed oil is pref. used. The molecular distn. of the scum pref. comprises a first fatty distn. for removal of low b.pt. component (water , residual ester, free fatty acid) and a second distn. of tocophe-ol, sterol and fat and oil component.

Stabiliser has excellent oxidn. stability and thermo-stability and is inexpensive. 20.3.79 as 033107 (5pp136)

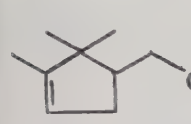
KA- ★ D23 88874 C/50 ★J5 5137-272
ftening creped cloth - using sulphuric acid ester salt of olive oil
TAKASHIMA SARASHI K (NKKC) 05.04.79-JA-041704
F06 (25.10.80) D06m-13/32
eped cloth and its blended yarn cloth of cellulosic fibres treated with a softening agent composed mainly of sulfuric acid ester, salt of olive oil to impart excellent ftness and hygroscopicity to the cloth and further subcted to softening process without skin damage in wearing the cloth. The sulphuric acid ester salt of olive oil is epd. by reacting 1 mole olive oil with 1-3 moles sulphat ng agent e.g. chloro-sulphonic acid, conc. H_2SO_4, and ming H_2SO_4 at a temp. <40°C and neutralised with alkali g. NaOH and KOH. Softening agent is used as a 1-5% ln. for padding and 5-20% o.w.f. soln. for immersing ocess. 5.4.79 as 041704 (3pp84)

AIY- ★ D23 89195 C/50 ★J5 5139-330
amphorene derivs. useful in perfume compsns. - obtd. by ndensing camphorene aldehyde with aliphatic aldehyde in esence of alkali followed by selective redn.
TAIYO KORYO KK 13.04.79-JA-044285
E15 (31.10.80) A61k-07/46 C07c-29/14 C07c-33/12 C07c-45/74 C07c-47/22
amphorene derivs. are of formula (I). In (I) R is ethyl, (iso)propyl or n-butyl. Perfume compsns. con -tain ⩾1 of cpd. (I).

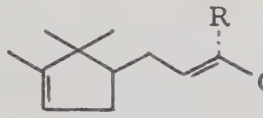


(I)

Prepn. of (I) comprises condensing cam horene aldehyde of formula (II) with aliphatic aldehyde



(II)



(IV)

formula R_1CHO, (III) (where R_1 is propyl, n-butyl, isotyl or n-pentyl) in the presence of alkali, to obtain α,β-usatd. aldehyde of formula (IV) is followed by selective dn. of the aldehyde gp. 13.4.79 as 044285 (8pp75)

GA- ★ D23 89202 C/50 ★J5 5139-340
thyl 2-acetonyl-2-acetonyl-2-tetra:decene-13-inoate - used as rfume component with scent of Chinese quince
NAGAOKA KORYO KK 18.04.79-JA-047695
E17 (31.10.80) A61k-07/46 C07c-67 C07c-69/73
Acetonyl-2-tetradecene-13-inoate of formula CH_3COCH_2-$COOCH_3$)=CH-$(CH_2)_8$-CH_2-C=CH (I) is new. (I) is prepd. saponifying litsenoride B_1 and/or B_2 with alcoholic alk-, acidifying with hydrochloric acid to liberate the acid, methylating with diazomethane.
(I) is useful as a perfume having a scent of Chinese nce. 18.4.79 as 047695 (3pp75)

OF D23 70247 V/40 =J8 0044-797
ty acid 2-stage purifcn. - by heating and vacuum distilling with t amine, then antoxidant
NIPPON OILS & FATS KK 16.10.72-JA-103452
*E17 (14.11.80) *J49061-114 +C11c-01/10*
2C Fatty acids are purified in 2 steps by heating first h 0.3-2% org. amine at 130-250° for 0.5-3 hr. in an in- gas and subsequent vacuum distn. followed by similar atment with 0.3-2% antioxidant.
In an example 100g beef tallow fatty acid was heated h 1.5g o-phenylenediamine at 220° for 1 hr. under N, cd. at 2 mm, and the distillate stirred with 1g lauryl Late at 200° for 1 hr. Vacuum distn. gave 91.2g purified y acid, which underwent less discolouration on esteri- tion or heating with diethanolamine. Phenyl-α-naphthyl nine or cyclohexylamine was also the amine. 16.10.72 103452, C11c-1/10 (14.11.80) JAPAN OILS & FATS CO. p) (J49061114)

DAIL D23 85774 X/46 =J8 0045-078
Epoxidising vegetable oil using per-acetic acid oxidising agent - in presence of phosphoric acid or salt as stabiliser
DAICEL KK 25.03.75-JA-034915
*E13 (E36) (15.11.80) *J51109-909 C07d-303/42 C11c-03 +B01j-27/14 C07d-301/14*
Qualities of epoxidised vegetable oils are improved by oxidising agent, the reaction being carried out by allowing phosphoric acid expressed by $H_{n+2}P_nO_{3n+1}$ 8where n is 1 to 4) or a salt thereof to be present in the gaseous phase of the epoxidation reaction. Examples of the phosphoric acid are phosphoric acid, pyrophosphoric acid, tripolyphosphoric acid, tetrapolyphosphoric acid, Examples of salts are Na salt or K salt. The phosphoric acid inhibits decompsn. of the peracetic acid. Moreover, it improves the quality (acid value, colour) of the epoxidised vegetable oil obtd.

When the liq. reaction mixt. of the epoxidation of the vegetable oil is washed with water, the colouring of the initial stage of the prod. is remarkably reduced. 25.3.75 as 034915, C07d-301/14, 303/42, C11c-3/00, B01j-27/14 (15.11.80) DAICEL KK (3pp) (J51109909)

JAGA D23 05365 A/03 =J8 0045-118
Deodorisation of oil and fat distillates - by using coolant contg. caustic soda and converting part of fatty acid components to sodium soap
JGC CORP 28.05.76-JA-061963
*J01 (15.11.80) *J52144-369 +C11b-03/14*
Process for removing odourous components of oils and fats distilled in a high vacuum environment of a deodorising column, together with water vapour. A mixt. of the odourous components with the water vapour is cooled by a coolant contg. caustic soda flowing in a parametric conden -ser until condensed. A part of the fatty acids contained in the odourous components is converted to a sodium soap. The soap is dissolved in water to prepare a soln. and the soln. is circulated into the condenser through a hot well and cooler.

The object is to treat the odorous components for a long time, with the least consumption of coolant. The novelity lies in that caustic soda is added to the coolant to maintain the pH of the soln. at 8-12. 28.5.76 as 061963, C11b-3/14 (15.11.80) JGC CORP. (4pp26) (J52144369)

NISW D23 80243 Y/45 =J8 0045-119
Removal of fat or oil from clay used in decolourisation - by slurrying with water and alkali and heating under pressure
NISSHIN OIL MILLS KK 25.03.76-JA-031946
*(15.11.80) *J52115-806 C11b-13/04*
Oil-contg. clay which has been used for decolourisation of animal or vegetable fat or oil is made into a slurry by add -ing water and alkali in an amt. necessary to saponify the oil. The fat or oil is released by subjecting the clay to a temp. of > 110°C under high pressure, pref. after heating at 90-95°C.

The oily substance which floates on addn. of acid in an amt. necessary to neutralise the floated oil is sepd. and re -covered. The slurry is then treated with alkali by forcing it into a tubular structure with high pressure steam.

Fat or oil contd. in the clay is almost completely sepd. and recovered in a short time. Pollutional problems caused by the waste clay and waste water are eliminated. 25.3.76 as 031946, C11b-13/04 (15.11.80) NISSHIN OIL MILLS KK (3pp) (J52115806)

AKCA= ★ D23 89645 C/50 ★SU-730-674
Prodn. of linalool fragrant agent - by redn. of de:hydro-linalool in aq. alcohol in presence of palladium catalyst modified with cadmium sulphate
AS KAZA CATAL ELEC 21.06.77-SU-498513
E17 (30.04.80) C07c-27/04 C07c-33/02
Linalool, useful in perfumery as aromatic principle, is prepd by catalytic hydrogenation of dehydrolinalool in the presence of modified palladium catalyst on a carrier, in an aq organic solvent. The final prod yield and purity are increased by conducting hydrogenation of starting cpd. at 20-40°C(pref 30-40°C) and 1-30 atmos in aq alcohol us-

ing alcohol:water ratio of 1:1.

The palladium catalyst is modified by addn of 0.32-1 wt.% cadmium sulphate. The catalyst carrier is alumina. or barium sulphate. The method gives linalool in quantitative yields. Typical process time is 22 min.

Sokolskii, D. V., Pak, A. M., Kartonozhkina, O. I., et al Bul. 16/30.4.80. 21.6.77. as498513(3pp938).

NIKO= ★ D23 89753 C/50 ★SU-730-798

Compsn. for mfr. of perfume and cologne water - prepd. by blending three different natural and synthetic fragrant mixt. for light spicy balsam and jasmine scent

NIKOLAEV ALYE PARUS 10.08.77-SU-517086

(30.04.80) C11b-09

A blend of three natural and synthetic perfume has scent which is based on amber, musk etc.

The component giving a novel odour contg. (in wt.%): compsn: tuberose 0.4-2.5, iralya 1.4-4.5, santalidol 3.3-8.5 musk ketone 3.8-5.6 heliotropin or acetylanisole 3.9-20.0 comp amber No 1. 6.5-12.6 phenylethylalcohol 9.5-16.5 comp lily of the valley no 5 12.0-18.0, hydroxycitronellal 14.5-20.5, comp lilac No 7 18.0-25.0.

The component with light spicy balsam contains(in wt.%) comp tuberose 0.4-2.0, muscatel sage oil 1.4-3.5, iralya 1.4-3.5, cinnamic alcohol 3.0-5.0, santalidol 3.3-6.1, musk ketone 3.9-6.1, heliotropin or acetylanisole 3.9-5.7, comp dianthus No 1-22 3.5-6.5, comp. amber No 1 6.3-9.5, penylethanol 9.5-13.5, comp lily of the valley No 5 12.0-16.0 hydroxycitronellal 14.6-17.5, comp lilac No 7 18.0-24.0.

The component with a jasmine odour contains(in wt.%): comp tuberose 0.4-0.6, iralya 1.4-1.6, muscatel sage oil 1.4-1.6, comp jasmine No 222. 2.0-3.0 cinnamic alcohol 3.0-4.0, santalidol 3.3-3.7, musk ketone 3.9-4.1 heliotropin or acetylanisole 3.9-4.1 comp dianthus No 1-22 3.5-4.5 comp amber No 1 6.5-7.5, jasmine No 31 9.0-11.0, phenylethanol 9.9-10.1, comp lily of the valley No 5 12.5-13.5, hydroxycitronellal 14.6-15.4, comp lilac No 7 18.0-22.0.

Moroz, R. A., Rudyavskaya, V. T., Golubitskii, V. Z., et al Bul. 16/30.4.80. 10.8.77. as517086(4pp835).

SYNT= ★ D23 89754 C/50 ★SU-730-799

2-Methoxy-2,6-di:methyl-7-octanone - is used in perfumes and cosmetics for imparting fresh floral musk notes

SYNTH NATURAL PERFU 18.09.78-SU-666184

E17 (30.04.80) C11b-09

2-Methoxy-2,6-dimethyl-7-octanone(I) is used aromatic principle in perfurmery and cosmetics. It is a colourless liquid, (b.p. 62.5-63°C/1 mm Hg), it is made by oxidising 2-methoxy-2,6-dimethyloctanol-7. It has a fresh floral musk odour.

Typical cream perfume compsn contains(in %):methylnonylacetaldehyde 0.1, indole 0.3, ylang-ylang oil 2.0, methylionone 2.0, benzyl acetate 2.0, anisaldehyde 2.0 terpineol 3.0, amber musk 3.0, bergamot oil 5.0, jasmin A 5.0, cinnamic alcohol 8.0, benzyl salicylate 7.6, (I)10.0, heliotropin 15.0, phenylethylalcohol 15.0, hydroxycitronellal 20.0.

Cherkasova, T.P., Aul'chenko, I.S., Greshneva, T.E. et al Bul. 16/30.4.80. 18.9.78. as666184(2pp835).

SCMZ ★ D23 89964 C/50 ★US 4235-796

Fractional crystallisation of lipid(s) - with counter current washing of crystals with lipid depleted solvent

SCM CORP 26.09.78-US-946090

(25.11.80) C09f-05/10 C11b-03

The fractional crystallization of lipids (I) from a suitable solvent (much more or much less dense than (I) crystals) is as follows:(a) liq. (I) is introduced to a crystallization zone between 2 separate outlets (1 for dil. liq., 1 for washed crystal-contg. slurry);(b) solvent (at not more than the zone temp) is added as a wash to the zone near the washed slurry outlet(where at least some flows towards the dil. liq. outlet) and liq. solvent is also present throughout the zone;(c) heat is removed from the zone to afford a slurry of (I) crystals, solvent, and dissolved (I); (d) crystals moved in a net direction towards the washed slurry out (e) a washed crystal-contg. slurry depleted of dissolve is established and kept around the washed slurry outlet and the washed slurry is withdrawn from this outlet;(f) liq. contg. (I) dissolved in solvent is withdrawn from th dil. liq. outlet; and (a) the washed crystals are recove from the withdrawn slurry.

Method using a countercurrent flow of fresh solvent a (I) crystals recovered allows the fractional crystallisat of a variety of (I) to be effected in a simple, efficient m -er. 26.9.78 as 946090 (5pp478)

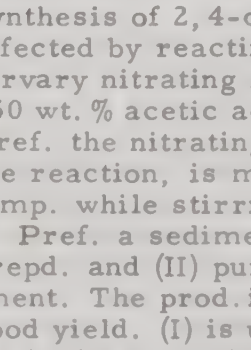
POLA D23 69926 B/39 =US 4235-

Nitrile cpds. with a 1-methyl-4 isopropyl:cyclohexane carb skeleton - are useful perfume ingredients, e.g. for soap, cosme and household goods

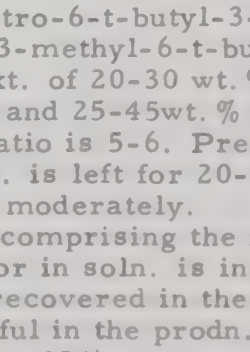
POLAK'S FRUTAL WORKS INC 20.03.78-GB-010938

*E15 (D21 D25) (25.11.80) *BE-874-963 C07c-121/48*

A mixt. of nitrides of formula (I) or (II) (where R_1 and R are H or 1-6C alkyl and have between them a C number



(I)



(II)

6 and where the me substits. are p sent on each cpd.) novel and useful in variety of perfume applications.

Examples of such cpds. are 3-(1-methyl-4-isoproper cyclohexenyl-6)acrylomtrile and 3-(3-methyl-6-isoprope -1cyclohererylidene-4-)propane nitrile. 14.3.79 as 0203 (7pp393)

NAAR D23 08297 A/05 =US 4235-8

(2,6)-Nona:di:enyl nitrile as perfume component - with inten green cucumber like fragrance

NAARDEN INT NV 27.07.76-NL-008333

*E16 P34 (25.11.80) *BE-857-170 C07c-47/22*

4-heptyral-acetal is prepd. by reacting alpha halo-propi -aldehyde acetal and an alkali metal butynilide, and opt. hydrolysin g the prod. with acid to form 4-heptyral.

The butynilide is prepd. by reacting butyn-1 with an a -ali metal amide in a polar solvent at -60°C to +80°C. Alpha halopropionaldehyde acetal is prepd. by reacting acrolein with a hydrogen halide and a 8C aliphatic or a -hatic alcohol or aliphatic diol at -80°C to +80°C. Pref. the hydrogen halide used is hydrogen bromide, an excess of alcohol is used provide a solvent medium, and the tem is -20°C to +30°C.

Prod. is esp. used as the starting material for the prepn. of the fragrance cpd. 2,6-nonadiene nitrile. 9.11. as 959233(+22.7.77-US-817914)(4pp931)

POUE D23 53863 B/29 =US 4236-0

Prepn. of 2,4-di:nitro-6-tert. butyl-3-methyl-anisole - by nitrating methyl-6-tert. butyl-anisole with a mixt. of acetic acid, ace anhydride and nitric acid

POUDRES & EXPLOSIFS 29.12.77-FR-039625

*E14 (25.11.80) *NL7812-475 C07c-79/35*

Synthesis of 2,4-dinitro-6-t-butyl-3-methylanisole (I) is effected by reacting 3-methyl-6-t-butyl anisole (II) with tervary nitrating mixt. of 20-30 wt.% acetic anhydride, 3 -50 wt.% acetic acid and 25-45wt.% nitric acid at 5-30°C Pref. the nitrating ratio is 5-6. Pref. on completion of the reaction, is mixt. is left for 20-90 minutes at ambie temp. while stirring moderately.

Pref. a sediment comprising the nitrating mixt. is fi prepd. and (II) pure or in soln. is introduced into the rec iment. The prod. is recovered in the pure state and with good yield. (I) is useful in the prodn. of a recent article. 18.12.78 as 970139(4pp924)

See Also

D13 US 4235793

D24: SOAP; SOAP DETERGENTS

UNIL ★ D24 C/50 ★BR 8002-198
Dimensionally-stable detergent bars and their prepn.
UNILEVER NV 12.04.79-GB-013074
(25.11.80) C11d-01/12 9.4.80 as 002198

D25: OTHER DETERGENTS

KAOS D25 63453 V/36 =DS 2406-965
Powdered quaternary ammonium salts - containing long alkyl chains useful as textile softeners, as rinsing agents and in sterilization
KAO SOAP KK 20.02.73-JA-020408
*E19 (D22) (04.12.80) *DT2406-965 C07c-85/26 C07c-87/30*

Quat. ammonium salts with long chain alkyl gps., e.g. dimethylmyristylbenzylammonium chloride, are obtd. in powder form. A pourable mixt. of the salt with 1-33(5-20) % water and/or alcohol at a temp. at which neither decomposition or discolouration occurs is spray dried while cooling to room temp. or 8-10°C. 14.2.74 as 406965(3pp)

KAOS ★ D25 89301 C/50 ★J5 5139-500
Storage stable bleaching agent compsn. - contains inorganic peroxide, activating agent and imido-bis-sulphate
KAO SOAP KK 19.04.79-JA-048300
E19 (E37) (31.10.80) C11d-07/54

Bleaching agent compsn. comprises (A) 5-90 wt. % of inorganic peroxide (e.g. $4NaSO_4.2H_2O_2.NaCl$) pH of 1 wt. % aq. soln. of which is $\leqslant$10, (B) 1-40 wt. % of activating agent e.g. glucose pentaacetate, octaacetylsucrose, sorbitol, hexaacetate, tetraacetylethylenediamine, etc.) and (C) 1.5-30 wt. % of imido-bis-sulphate of formula, $(MSO_3)_2NM'$ M is cation of alkali metal and ammonium, and M' cation selected from H, alkali metal and ammonium)(e.g. trisodium imido-bis-sulphate).

The bleaching agent composition does not generate irritating odour of organic acid, etc. and can be stably stored for long period. The bleaching compsn. is pref. moulded into granular form. The compsn. does not generate acetic acid odour in contrast with previous bleaching compsn. Component (C) is e.g. $(NaSO_3)_2NNa$, $(NaSO_3)_2NNa.H_2O$. 9.4.79 as 048300 (5pp50)

EGS D25 32456 W/20 =J8 0045-487
Improving the wettability of natural and synthetic zeolites - by treating with a soln. of a polycarboxylic electrolyte
DEUTSCHE GOLD & SILBER 31.10.73-DT-354432
*A97 (18.11.80) *BE-821-708 C01b-33/28 C11d-03/08*

The wettability of natural or synthetic zeolites is improved by treating for $\geqslant$5 mins. with an aq. soln. of $\geqslant$1 polycarboxylate polyelectrolyte totally or partially neutralised with $\geqslant$40, partic. $\geqslant$60 mol % of base and having a degree polymsn. of 3 to 5000, esp. 3 to 100.

The treatment is carried out at 0-100°C partic. 20-50°C the soln. contg. 2.800g polycarboxylate/l partic. 15-400 g/l using 0.01 to 10 pts. partic. 0.05-1 pt. of polycarboxylate/pt. of zeolite. The zeolite may be treated by stirring in a vessel or by spraying in a mixer and the hydrophilised zeolite is then dried.

Used for depositing edible paste confections in materials such as sugar icing, cream, beaten egg white etc. for the mass-production of cakes, tarts, gateaux etc. esp. for industrial bakeries. 16.10.74 as 119142 (clg.31.10.73-DT-4432) C01b-33/28, C11d-3/08 (18.11.80) DEUTSCHE GOLD & SILBER (10pp) (J50074600)

STII- ★ D25 C/50 ★RU --65-932
Antistatic compsn. - comprises polyethylene glycol soln. of sodium salts of sulphonated, higher glycol ester(s)
STIINTR DETERGENT TIMI (STII-) 30.06.75-RU-082708
A97 E16 (28.02.79) C07c-87 C08k-05/17

MIRA- ★ D25 C/50 ★RU --67-797
Detergent compsn. - based on sodium lauryl ether sulphate, Veronica beccabunga extract, alkanol-amide and usual additives
MIRAJ INTR PROD COS 26.09.77-RU-091660
E19 (28.07.79) A61k-07/06

NOVO= ★ D25 89755 C/50 ★SU-730-800
Water-based aerosol textile cleanser - prepd. from five surfactants and styrene-maleic anhydride copolymer ammonium salt
NOVOMOSKVA AEROSOL 27.06.77-SU-498900
A97 (30.04.80) C11d-01/12 C11d-03/44

Cleansing action of water-based aerosols are used for cleaning soft furnishings etc is enhanced and wettability with repeated soiling are minimised by using base contg. (in wt. %) Na alkylsulphate 0.5-0.8, diNa monoalkylsulphosuccinate 1.4-2, triethanolamine laurylsulphate 0.65-1, water-sol styrene-maleic anhydride copolymer NH_4-salt 0.3-0.6, 10-13C synthetic fatty acids diethanolamide 1-1.5, ethanol 3-4 Na tripolyphosphate 0.65-1, perfume 0.06-0.12, propellent e.g. CF_2Cl_2 +petroleum spirit 27-32, remainder - water.
Rumyantseva, I.N., Gorshkova, I.I., Bukareva, N.A., Bul. 16/30.4.80. 27.6.77. as498900(3pp835).

GLYC- ★ D25 89876 C/50 ★US 4235-599
Textile bleaching at low washing temps. - using soln. of N,N-di:chloro-5,5-di:alkyl hydantoin and bromide salt
GLYCO CHEMICALS INC 30.05.78-US-911190
E13 F06 (E37) (25.11.80) D06l-03/06

Bleaching of textiles at 100-140°F is effected using an aq. soln. contg. a mixt. of 25-75(pref. 40-60)pts. wt. of a N,N-dichloro-5,5-di(1-8C alkyl)-hydantoin (I) and 75-25 (pref. 60-40)pts. wt. of an alkali(ne earth)metal or ammonium bromide (II).

Addn. of (II) reduces the temp. and concn. of (I) at which effective bleaching can be achieved. (I) is pref. N,N-dichloro-5,5-dimethylhydantoin (Ia), and (II) is pref. an alkali metal bromide(esp. NaBr). 30.5.78 as 911190(6pp)

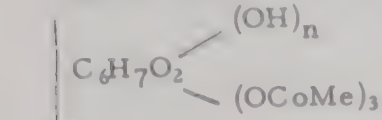
DOWC ★ D25 89934 C/50 ★US 4235-734
Liq. foamable acid compsns. - contg. acid, foaming agent, and an alkanol as foam stabiliser
DOW CHEMICAL CO 30.11.78-US-964868
A97 E19 H01 (A25) (25.11.80) C11d-07/08

Foam derived from a foamable acid compsn. consists of: (a) a foam generating amt. of $\geqslant$1 soluble cationic surfactant (I); and (b) a foam-stabilising amt. of 1 alkanol (II) (opt. contg. an inert substit.); dissolved in (c) an aq. acid. (II) is pref. a monoether in which 1-4 mol. of ethylene oxide are condensed with a 1-4C alkanol or PLOH, a poly-oxyethylene glycol (average mol wt. 200-2000) or a poly-oxypropylene glycol (average mol. wt. 500), esp. ethylene glycol n-butyl ether and polyoxypropylene glycol of average mol. wt. 350-400.

The foams contg. (II) have increased foam height and stability, and are esp. useful for cleaning ferrous surfaces and fracturing subterranean formations. 30.11.78 as 964868(4pp478)

DEER ★ D25 89935 C/50 ★US 4235-735
Laundry detergent compsns. - contg. cellulose acetate polymeric anti re:deposition agent
MILLIKEN RES CORP 30.07.79-US-061632
A97 (A11) (25.11.80) C11d-03/22

Compsn. contains (a) an organic synthetic detergent (I) to remove soil, etc .; and (b) a cellulose acetate polymeric antiredeposition agent (II)



(where x is 25; n=2.5-0.7) with a degree of substn. of the MeCO moiety of 0.5-2.3 (i.e. 3-n).

Compsns. are effective in preventing the redeposition of soil on synthetic fabrics (esp. polyesters), synthetic cotton blends, and cotton fabrics. In addn., the compsns. improve soil removal from laundered fabrics, allow synthetics to pick up optical brighteners, and impart soil release and H_2O transport characteristics to fabrics (esp. polyesters and nylon. 30.7.79 as 61632(5pp488)

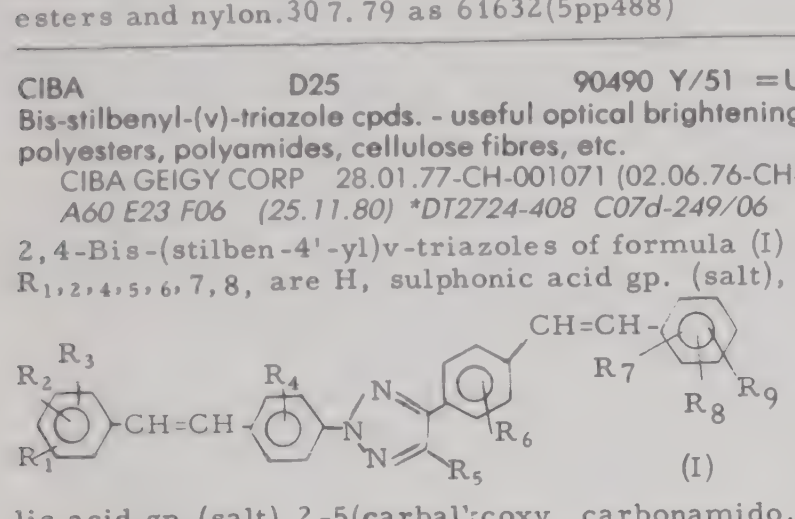
CIBA D25 90490 Y/51 =US 4235-741

Bis-stilbenyl-(v)-triazole cpds. - useful optical brightening agents for polyesters, polyamides, cellulose fibres, etc.

CIBA GEIGY CORP 28.01.77-CH-001071 (02.06.76-CH-006933)

*A60 E23 F06 (25.11.80) *DT2724-408 C07d-249/06*

2,4-Bis-(stilben-4'-yl)v-triazoles of formula (I) are novel. $R_{1,2,4,5,6,7,8}$, are H, sulphonic acid gp. (salt), carboxy-



(I)

lic acid gp. (salt), 2-5(carbalkoxy, carbonamido, CN, or halogen. R_1 and R_7 may also be sulphonamido, (substd.) alkyl, (substd.)allcoxy, (substd.)aralkyl, (substd.)aryl, (substd.) aryloxy, aralkoxy, opt. substd. Cycloalkyl, or opt. substd. 5-membered heterocyclic ring selected from v-triazole, oxazole on 1,3,4,-oxadiazole opt. fused with benzene ring.

R_2 and R_8 may also be (substd.) alkyl or (substd.) alkoxy or may combine, together with R_1 and R_7, to form methylene-dioxy, methyleneoxymethylenoxy, trimethylene, tetramethylene, propenylene, butenylene or butadienylene. R_4 and R_6 may also be sulphonamido. R_5 may also be sulphonamido, (substd.) alkyl, (substd) aryl, (substd) aralkyl, (substd.)styryl or $-CH_2OZ$ (in which Z is OH, (substd.)benzoyl or 2-19C alkanoyl). R_3 and R_9 are H halogen or (substd.) alkyl.

(I) are optical brighteners. 15.6.79 as 048965(+20.5.77-US-799058)(16pp977)

UNIL D25 61747 B/34 =US 4235-752

Detergent and esp. dishwashing compsn. - contains specifically active sec. alkyl sulphate isomers and opt. co-surfactant (BE 14.8.79)

LEVER BROTHERS CO 14.02.78-GB-005837

*A97 (25.11.80) *DT2904-945 C11d-01/14*

Novel detergent compsns. comprise as the active detergent component 1 10-18C sec. alkyl sulphates. The sulphates contains ≤ 50% 2- and 3-sulphate isomers and ≥ 40% 2-C_{14}, 2-6-C_{15}, 3-7-C_{16} and / or 7-9-C_{17} sulphate isomers.

Pref. the compsn. contains ≥ 60% of the latter isomer esp. of 2-5-C_{15} and 4-6-C_{16} isomers.

Compsns. have improved dishwashing props. 9.2.79 as 010666(6pp974)

UNIL D25 49430 B/27 =US 4235-75

Stable liq. detergents with low hydrotrope content - based on mix of magnesium alkylbenzene sulphonate and alkyl-polyethe sulphate and/or nonionic surfactant (NL 26.6.79)

UNILEVER NV 22.12.77-GB-053475

*A97 E19 (25.11.80) *DT2855-776 C11d-01/24*

Novel clear stable liq. detergent compsns. having a clear point 20°C consist of 35-55 wt.% detergent mixture (I), 0-12 wt.% hydrotrope (II) and water.

(I) is a mixt. of 1-5 wt. pts. Mg alkylbenzene sulphonat derived from a linear 10-13C alkylbenzene of ave. mol. v 225-245 and contg. 4 wt.%(w.r.t. sulphonate) or dialky tetraline with 1 wt. pt. $R(C_2H_4O)nOSO_3M$, where R is 10-18C alkyl, n is 1-8 and M is an alkali metal, ammonium or amine cation. (II) is urea and/or a 2-4C alcohol. 21.12.78 as 972155(5pp974)

TEXC ★ D25 89974 C/50 ★US 4235-81

Sulphonic acid derivs. of alkoxylated amine(s) - useful a surfactants, esp. detergents

TEXACO DEV CORP 02.04.79-US-026270

A97 E16 H01 (A25) (25.11.80) C07c-143/02 C11d-03/06

Suphonic acids of formula (I) and their alkali(ne earth)metal salts are new:

$$R(OCH_2\underset{Me}{C}H)n(OCH_2CH_2CH_2)mNHCH_2\underset{X}{C}HCH_2SO_3H \quad (I)$$

where X is H or OH; R is 6-18C alkyl; n has an av. value of 0-20 and m= 0 or 1, provided that m=1 when n=0) To prepn. please (I) and/or their salts are surfactants useful as components of detergent compsns. The salts have good water solubility and are not pptd. by Ca^{2+} ions. (I) are prepd. by reacting $R(OCH_2CHMe)n(OCH_2CH_2CH_2)mNH_2$ (II) with propane sultone (II) or 3-chloro-2-hydroxypropanesulphonic acid. 2.4.79 as 026270(11pp367)

See Also

D16 SU 730276 D23 CH 620099 D23 US 4235805

AIRL 01.06.77 AIR LIQUIDE L' B05 D16 =DS 2823-469
Tetracycline antibiotics fermentation prodn. - 00263B/01
AJIN 13.06.73 AJINOMOTO OCEA B04 D16 =J8 0045-193
Novel antibiotic cytrimycin - 41819W/38
AJIN 14.07.73 AJINOMOTO KK D13 E12 (E11) =J5 0025-749
Mfg. soybean curd of enhanced structure and taste - 89354C/50
AJIN 14.07.73 AJINOMOTO KK D13 E12 (E11) *J8 0045-171
Mfg. soybean curd of enhanced structure and taste - 89354C/50
AJIN 22.09.73 AJINOMOTO KK B02 D16 =J8 0045-198
Guanosine microbial prodn - 82151W/50
AJIN 30.03.74 AJINOMOTO KK B02 D16 =J8 0045-200
Xanthosine microbiological prodn. - 78094Y/44
AJIN 24.02.77 AJINOMOTO KK D13 =GB 1581-319
Liq.seasoning compsn. prepn. - 75344A/42
AKCA= 21.06.77 AS KAZA CATAL ELEC D23 E17 *SU -730-674
Prodn. of linalool fragrant agent - 89645C/50
AKGO= 16.06.77 AS KIRG ORG CHEM A11 B04 D13 J01 *SU -730-692
Cellulose powder prepn. - 89663C/50
ALBR 20.03.80 BUSH BOAKE ALLEN LT D23 E17 =GB 2048-253
4,8,Di:methyl 4,9-decan:dienal - 72784C/41
ALFA 27.02.79 ALFA-LAVAL AB C04 D15 E17 =FR 2450-277
Ethanol prepn. by carbohydrate fermentation - 64462C/37
ALUP/ 06.09.75 ALUPEI G B02 D16 *RU --67-040
Rifamycin B and SV prepn. - C/50
AMCR 23.12.75 AMES CROSTA BABCOCK D15 *GB 1581-328
Dewatering press for sewage - 88746C/50
AMCY 02.08.76 AMERICAN CYANAMID CO A96 D21 E33 =CA 1089-368
Wax-like antiperspirant stick compsns. - 37077B/19
AMCY 22.04.77 AMERICAN CYANAMID CO A14 D25 E12 (A97 E14) #CA 089-577
Freeze-thaw stable water-in-oil emulsion of acrylamide polymer - 36066Y/20
AMPL/ 30.06.80 AMPLIKART P V B A D13 *BE -884-085
Writing instrument esp. a ball-pen fitted with lollipop - 88373C/50
AMSU= 27.04.78 A MED NUTRITION D13 *SU -730-337
Protein-rich milk product - 89482C/50
AMSU= 27.04.78 A MED NUTRITION B05 D13 *SU -730-338
Nutritive-medicinal compsn. for tube feeding - 89483C/50
ANIS 03.02.75 ANIC SPA D15 E11 F06 =CH -620-179
Removing anoinic organic impurities from aq. effluents - 61942X/33
ANPR- 23.03.79 ANPROSOL INC D22 E34 S03 (E33) =US 4235-332
Chlorine based sterilising soln. contg. phosphate buffer - 05974C/04
ANTI- 06.09.75 INT ANTIBIOTICE B04 D16 *RU --67-041
ICCF-DZ-323 Nocardia mutant - C/50
ANTI- 01.03.76 INTR ANTIBIOTICE B05 D16 E16 *RU --64-795
1-Lysine prepn. by fermentation - C/50
APVR 04.05.73 AGENCE NAT VALORISATION A96 B04 D16 *FR 2450-112
Product to purify and detoxify antibodies - 88704C/50
APVR 05.08.76 AGENCE NAT VALORISATION B04 C03 D16 =DS 2734-50
myxomatosis vaccine prodn. from attenuated virus strain - 12599A/07
APVR 20.05.77 AGENCE NAT VALORISATION A89 D16 J04 S03 (S05) US 4235-687
Enzymatic membrane micro:titration cell partic. for urine etc. - 14543B/08
APON 22.05.79 APONTOWEIL P B04 C03 D13 =WP 8002-505
Combined vaccine for poultry - 35879C/20
APVC 02.04.79 APV CO LTD D16 E13 (D17) =BR 8001-951
Continuous prodn. of glucose syrup - 75587C/43
ASAE 20.03.79 ASAHI DENKA KOGYO D23 E13 *J5 5137-185
Stabiliser for fat and oil - 88840C/50
ASAH 21.05.73 ASAHI CHEMICAL IND KK A11 B04 D16 =J8 0045-254
Polyphenols and diketones removal from fermentation products - 76243W/46
ASAH 04.06.76 ASAHI CHEMICAL IND KK D15 E35 =J8 0045-274
Decomposition of ammoniacal cpds. in aq. soln. - 07586A/04
ASAN- 17.04.79 ASANUMA SOGYO KK A96 D21 G02 (A26) *J5 5139-316
Nail enamel - 89186C/50
ASTR 06.10.71 ASTRA AB A96 B04 C03 D16 (D25) =SU -730-276
Injectable iron prepns - 23071U/17
ATOR= 01.11.77 AS UKR ORG CHEM D15 *SU -729-416
Aq. waste flame decontamination - 89434C/50

BADI 07.11.74 BASF AG D23 E13 =CH -620-435
Tipinyl-trioxan prepn. from 3-formyl-pinan enantiomer mixt. - 38269X/21
BADI 07.08.78 BASF AG A96 B04 D16 =US 4235-973
Prodn. of carriers for immobilising proteins, esp. enzymes - 15090C/09
BAKI= 21.11.77 BAKING IND RES INST D11 (D16) *SU -730-334
Leaven for mfr. of wheat or rye bread - 89479C/50
BALG 23.04.76 BALLAST-NEDAM GRP NV D15 =GB 1581-138
Gravity settler with many narrow channels - 75876Y/43
BALS/ 16.05.79 BALSSE C C03 D13 (C04) *WP 8002-557
Agglomeration of materials with animal blood - 90114C/50
BARR- 01.08.79 BARRY-WEHMILLER CO D13 (D14) *BE -884-565
Continuous pasteuriser for canned or bottled prod. esp. beer - 88384C/50
BATT 02.06.79 BATTELLE-INST EV A97 D21 *DT 2922-671
Chewable dentifrice compsns. - 88598C/50

BAUB 21.09.78 BAUER BROS CO D15 =US 4235-724
Waste water screening appts. - 33251C/19
BEEC 28.03.74 BEECHAM GROUP LTD B04 D16 =US 4235-882
Beta-lactamase inhibitor MM 4550 - 67721W/41
BEEC 20.04.74 BEECHAM GROUP LTD B02 C02 D16 #DK 8002-869
Clavulanic acids and derivs. - 72840W/44
BENC 17.03.72 BENCKISER J A GMBH D16 E17 H04 =J8 0044-596
Citric acid prepn - 60365U/41
*BERT- 01.03.79 BERTIN & CIE D13 *FR 2450-067
Industrial cryogenic shelling of cashew and similar nuts - 88699C/50
*BISC- 27.02.79 CENTRE BISCOTTE D11 *FR 2450-062
Mfr. of mechanically stronger and less friable rusks etc. - 88697C/50
*BJAR 16.05.79 BJARNO O C D12 S03 X25 *WP 8002-597
Detecting boar taint in carcasses of non castrated boars - 90130C/50
BLAC 05.04.76 BLACK CLAWSON CO D15 J09 (D14) =GB 1581-186
Conical press for liquid extraction - 74403Y/42
BLEN 15.03.79 BLENDAX WERKE SCHNEIDER D21 =DT 2922-365
Decorative cake of soap - 77358C/44
*BOCH/ 03.03.77 BOCHNER B R D16 *US 4235-964
Identification of anaerobic microorganism - 90037C/50
BOEF 13.06.75 BOEHRINGER MANNHEIM GMBH B04 D16 J04 S03 (S05) =CH -620-472
Automated enzymatic analysis using dissolved enzymes - 94294X/51
BOHN/ 02.03.79 BOHNKE B D15 =FR 2450-238
Installation for mechanical and biological purificn. of waste water - 49869C/29
*BOSC 25.05.79 BOSCH R GMBH D14 *DT 2921-236
Liquid food metering device - 88514C/50
BOSC 25.05.79 BOSCH R GMBH D14 =NL 8003-019
Liquid food metering device - 88514C/50
*BOUQ/ 01.03.79 BOUQUET P B05 D21 E24 *FR 2450-100
Developer for dental plaque - 88701C/50
*BRAN/ 04.05.79 BRANYIK A C03 D13 *CS 7903-088
Feedstuffs preserving agent prepn. - C/50
BRBL 11.11.75 BRAUNSCHWEIG MASCH D17 =DS 2550-496
Centriguging massecuite to produce sugar crystals - 14432Y/08
BRIM 30.08.72 BRISTOL MYERS CO B02 C02 D13 =DK 8002-916
Ceph-3-em 4-carboxylic acid derivs - 20484V/11
BRIM 31.08.72 BRISTOL MYERS CO B02 C02 D13 =DK 8002-915
7-Substd 3-substd ceph-3-em 4-carboxylic acid - 20505V/11
BRIM 13.12.74 BRISTOL MYERS CO B02 C02 D13 =RU --68-147
Antibiotic cephalosporin derivs - 48017X/26
*BROV 01.06.79 BROWN BOVERI CIE AG D15 X25 *DT 2922-348
Sea water desalination - 88568C/50
*BUCK/ 26.07.79 BUCKO M B05 D16 E16 *CS 7905-221
L-Lysine biosynthesis optimisation and regulation - C/50
BUCL 25.10.77 BUCKMAN LABS INC A97 D15 E11 M14 =CA 1089-315
Compsn. used to prevent corrosion and incrustation in aq. systems - 44129A/25
*BUTC/ 01.11.78 BUTCHER L D D18 X25 *FR 2450-045
Machine to strip tobacco leaves from their stalk - 88692C/50

*CADB 16.03.79 CADBURY SCHWEPPES LTD D18 E13 *GB 2048-251
Sucrose di-, tri-, and tetra-benzoate(s) - 88781C/50
*CAIL/ 23.09.76 CAILLOT B D15 *BE -884-522
Installation for treating waste water by aeration and decanting - 88378C/50
CANA/ 26.02.79 BOVE CANAL J D22 =GB 2048-075
Sanitary towel or similar adsorbent pad retained by undergarment - 49854C/29
*CANO 18.04.79 CANON KK D16 G06 *J5 5138-743
Fixing soln. for silver halide photographic material - 89072C/50
CASS 07.07.71 CASSELLA FARBW MAIN A41 D18 E16 =RU --68-812
Etherified methylol(thio)urea - 04396U/04
*CAZA/ 07.03.79 CAZALET M F D13 *US 4235-750
Storage of harvested crops - 89941C/50
CHAL 12.12.77 MACH CHAMBON D17 =CA 1089-220
Drying tunnel esp. for moulded moist sugar lumps - 24008B/13
CHCC 07.10.75 CHISSO CORP A88 D15 J01 =J5 2045-768
Material for increasing oil drop size in water - 89361C/50
*CHCC 07.10.75 CHISSO CORP A88 D15 J01 *J8 0045-242
Material for increasing oil drop size in water - 89361C/50
CHCC 19.01.77 CHISSO CORP A97 D18 F04 (A18) =DS 2801-211
Synthetic fibre tobacco filters - 55363A/31
CHEM- 27.05.76 CHEMITHON CORP D25 E19 J04 =CA 1089-486
Sulphonation process employing a venturi reactor - 90454Y/51
CHEM- 25.05.79 CHEMED CORP A97 D25 E34 (A14) =NL 8000-049
Foam cleaner concentrate for cleaning food plants - 78762C/44
*CHFA- 17.11.75 COMB CHIM FAGARAS D15 *RU --67-056
Combustor for treating residual water contg. organic matter - C/50
*CHFW 29.05.79 WERNER & MERTZ D11 *DT 2921-682
Activation of cereal grain for bread-making - 88536C/50
CHIN 27.01.71 CHINOIN GYOGYSZER C03 D13 E17 J04 =RU --64-759
Liquid conversion into powder - 53679T/34

CHLO-

CHLO- 26.03.71 CHLORELLA IND CO LT C03 D16 (D13) = J8 0045-182
Powdery chlorella extract prodn - 76952T/48
*CHRI/ 22.05.79 CHRISTIAN G J Y D15 J01 *BR 7903-250
Desalination furnace for saline water - C/50
CIBA 14.02.73 CIBA GEIGY AG A97 D15 (A14) = SU -730-293
Water treatment agents - 62419V/35
CIBA 24.09.73 CIBA GEIGY AG B03 C02 D22 (D13) = RU --64-925
N-(4-or 5-nitro-2-imidazolyl)-N,N'-alkylene-(thio)ureas - 22825W/14
CIBA 19.12.75 CIBA GEIGY AG D25 E12 G02 (E16) = CA 1089-465
Fluorinated alkylamido sulphonic acids - 25131Y/14
CIBA 02.06.76 CIBA GEIGY CORP A60 D25 E23 F06 = US 4235-741
Bis-stilbenyl-(v)-triazole cpds. - 90490Y/51
*CIGA 27.03.79 CIGARETTE COMPONENT LTD D18 J01 *BR 8001-961
Filter element - C/50
*COHE/ 20.10.78 COHEN M D D13 *US 4235-795
Extending the life of shortening for deep frying - 89963C/50
COLG 15.01.73 COLGATE PALMOLIVE CO D25 = CH -620-241
Phosphate-free detergents for washing linen - 38352V/21
COLG 15.01.75 COLGATE PALMOLIVE CO B05 D21 E11 (E33) = CH -620-360
Dentrifice paste contg alpha alumina hydrate - 44092X/24
COLG 15.12.75 COLGATE PALMOLIVE CO D25 E13 F06 (D21 D22 E37) = CA 1089-158
Stabilised bleaching compsn. - 27217Y/16
*COLG 11.06.79 COLGATE PALMOLIVE CO D21 E33 (E34) *US 4235-874
Dentifrice contg. mixed polishing agents - 90004C/50
COMM- 03.04.79 COMMODITIES TRADING D13 = BR 8002-165
Continuously alkalising and pasteurising cocoa beans - 77304C/44
*CONO 13.03.78 CONOCO INC B05 C03 D22 *GB 1581-428
Direct alkylation of phenol(s) - 88752C/50
*CONO 05.04.79 CONOCO INC A97 D15 (A25) *US 4235-712
Removal of water-soluble anionic surfactants from water - 89925C/50
COPH 26.05.76 COOPERATION PHARM F B02 D21 E13 = CH -620-430
Antiulcer water-insoluble salts of (N)-acetyl tryptophan - 84730Y/48
CORP 12.05.76 CPC INTERNATIONAL INC D17 = US 4235-965
Conc. dispersions of liquefied starch prepn. - 92371X/50
CORP 05.08.76 CPC INTERNATIONAL INC D16 (D17) = CA 1089-384
Inactivating the protease in alpha-amylase - 10283A/06
CORP 05.08.76 CPC INTERNATIONAL INC D16 (D17) = US 4235-970
Inactivating the protease in alpha-amylase - 10283A/06
COSM- 22.05.74 SHIN COSMOS DENKI K D15 E36 J04 = J5 0150-491
Measuring chlorine concn. of e.g. sterilised water - 89347C/50
*COSM- 22.05.74 SHIN COSMOS DENKI K D15 E36 J04 *J8 0044-907
Measuring chlorine concn. of e.g. sterilised water - 89347C/50
CSEP 28.02.73 CHEM SEPARATIONS US CORP C04 D15 #RU --65-172
Treatment of ammonium nitrate prodn residual - 54018U/37
*CTWO- 21.05.79 C2F INVESTMENT CO D15 *WP 8002-556
Waste water treatment by trickling filtration - 90113C/50
CUST- 07.10.77 CUSTOM CHEMICIDES C03 D13 #CA 1089-284
Increased honey bee pollination - 21212A/11
*CVAK/ 08.03.79 CVAK Z C03 D13 *CS 7901-564
Feedstuff additive - C/50

DAIL 25.03.75 DAICEL KK D23 E13 (E36) = J8 0045-078
Epoxidising vegetable oil using per-acetic acid oxidising agent - 85774X/46
DAIL 13.06.77 DAICEL KK D15 J01 = GB 1581-122
Liquid treatment using folded membrane - 00305B/01
DAIL 13.06.77 DAICEL KK D15 J01 = US 4235-722
Liquid treatment using folded membrane - 00305B/01
DAIL 26.09.77 DAICEL KK B05 C03 D22 E17 = J8 0045-521
Non-medical fungicide and antibiotic - 41285B/22
*DAIL 03.03.79 DAICEL KK A81 C03 D22 F09 *J5 5117-611
Prodn. of plywood impregnated with insect control agent - 88819C/50
*DAIN 13.04.79 DAINIPPON PHARM KK D16 E14 *J5 5138-399
Stabilised compsn. for beta-D-galactosidase determn. - 89056C/50
*DAIW- 12.04.79 DAIWA MARCANT KOGYO A97 D22 E17 G02 (D13) *J5 5137-175
Ink compsn. for marking of skin - 88833C/50
*DALE/ 04.08.80 DALEMANS L D14 *BE -884-630
Chopping device for cutting stalks of vegetables into small pieces - 88395C/50
*DALI/ 10.05.79 DALIBA J D12 *CS 7903-188
System for ventral cutting of fish - C/50
*DARI- 01.09.78 DARI-DESSERTS INC D13 *US 4235-578
Appts. for moulding provolone cheese loaves - 89873C/50
*DAUG= 18.09.78 DAUGAVPILS MEAT D13 (D16) *SU -730-336
Lactic flora bacterial starter for cheddar-type cheese mfr. - 89481C/50
*DAVI/ 28.05.79 DAVID F C03 D13 (D16) *CS 7903-663
Ergotic wheat processing - C/50
*DAWI/ 00.00.79 DAWIDOWSKI G D22 *DT 2920-476
Bone fracture encircling wire - 88463C/50
*DEDE- 31.07.80 DEDERT-PAKTOE BV D11 *NL 8004-385
Bread slicing machine with reciprocating knife drive - 89415C/50
*DEER 30.07.79 MILLIKEN RES CORP A97 D25 (A11) *US 4235-735
Laundry detergent compsns. - 89935C/50
DEER- 02.05.79 DEER PARK BAKING CO D11 = GB 2048-198
Cookie mfg. appts. with transfer conveyor - 80648C/45
*DEGM 01.03.79 DEGREMONT SA D15 E35 *FR 2450-236
Removing ammonia from water, esp. for drinking - 88715C/50
*DEGM 03.04.79 DEGREMONT SA D15 E33 L02 *BR 8002-031
Prepn. of a silico-aluminate suspension - C/50
DEGS 31.10.73 DEUTSCHE GOLD & SILBER A97 D25 = J8 0045-487
Improving the wettability of natural and synthetic zeolites - 32456W/20
*DEGS 25.05.79 DEGUSSA AG D21 M22 *DT 2921-192
Dental alloy casting appliance - 88508C/50
*DERM- 30.03.79 DERMIK LABS D21 E12 *US 4235-873
Antiperspirant and deodorant compsns. - 90003C/50
*DIGG/ 28.10.75 DIGGS R E D15 *US 4235-680
Purifying water with dissolved solid contaminants - 89909C/50
DION- 12.04.79 DIONEX CORP B04 D14 J04 S03 #J5 5138-654
Chromatographic sepn. of anions and cations - 77214C/44
*DMVC- 22.08.80 DMV CAMPINA BV D13 *NL 8004-765
Whipping cream contg. mono-glyceride lactate(s) - 89417C/50
DNIN 26.02.73 DAINIPPON INK CHEM KK D16 H04 = J4 9109-576
Aerobic fermentation process - 66558V/38
DOHP- 07.04.72 DAI-DOH PLANT ENG D15 E33 = J8 0045-635
Dissolved aluminium - 64297U/43
*DONA/ 04.07.80 DONADELLI F B04 D21 S05 *BE -884-577
Solns. for skin treatment - 88386C/50
*DOWC 21.08.78 DOW CHEMICAL CO B04 D16 J04 *US 4235-962
Diagnosis of liver disorders by measuring transaminase in body fluids 90035C/50
*DOWC 22.09.78 DOW CHEMICAL CO A91 D15 E36 J03 (A13) *US 4235-717
Polystyrene ion exchange resin contg. trapped polyacrylic acid 89927C/50
*DOWC 30.11.78 DOW CHEMICAL CO A97 D25 E19 H01 (A25) *US 4235-734
Liq. foamable acid compsns. - 89934C/50
*DOWC 16.04.79 DOW CHEMICAL CO A96 D22 *J5 5139-425
Cpd. of poly:oxazoline(s) or poly:oxazine(s) and poly:halide anion C/50
DOWC 20.04.79 DOW CHEMICAL CO D16 #DK 7901-631
Prodn. of thermally stable glucose isomerase - 79172C/45
DUNK/ 29.09.76 DUNKERS K R D15 = CA 1089-374
Sepg. heavy and lightweight materials e.g. oil, sand etc. from water 25715A/14
DUPO 23.02.71 DU PONT DE NEMOURS CO A96 B07 D22 = J8 0044-727
Polylactides and medicaments compsns - 58258T/37
*DUPO 05.06.72 DU PONT FAREAST INC D16 E13 *J8 0045-524
Cultivation of edible mushrooms using wood powder - 89388C/50
*DYNA- 26.04.76 DYNATECH LABS INC D16 *US 4235-971
Automated inoculator appts. - 90040C/50

EBAI 25.03.74 EBARA INFILCO KK D15 = J5 0134-974
Oxidation of waste liq. by contacting with oxygen rich gas - 89370C/50
*EBAI 25.03.74 EBARA INFILCO KK D15 *J8 0045-277
Oxidation of waste liq. by contacting with oxygen rich gas - 89370C/50
EHRN/ 16.03.76 EHRNFORD L E M A96 D21 = GB 1581-067
Fine porous glass mesh reinforcement for dental cements - 48861Y/28
*EIKE- 16.04.79 EIKEN KAGAKU KK D16 *J5 5138-398
Colorimetric measurement of lactic acid dehydrogenase - 89055C/50
*ELED 14.04.79 DENKI KAGAKU KOGYO CO D16 E16 (E14) *J5 5138-389
Aminoalcohol prepn. - 89051C/50
*EMEL/ 11.09.78 EMELYANOV B V D13 *SU -730-335
Protective coating on eggs for storage - 89480C/50
*ENDO/ 13.04.79 ENDO A B03 D16 *J5 5139-396
hypocholesterolaemic monocolin J - 89238C/50
*ENGH 17.01.77 ENGELHARD MINERALS CORP D21 M26 *US 4235-631
Corrosion-resistant silver-copper-tin dental alloy - 89889C/50
*ENIE- 29.05.79 ENI ENTE NAZ IDROCA A97 D13 *DT 3020-075
Coagulation of milk - 88671C/50
*ERCH= 11.02.77 EREV CHEM REAGENT WKS D11 E17 (D13) *SU -730-678
Prodn. of stearoyl-butyric acid food surfactant prodn. - 89649C/50
ERID- 30.07.74 ERIDANIA ZUCCHE D16 = CH -620-242
Dry yeast of increased stability in air - 81535W/50
*EVER- 01.06.79 EVERPURE INC D15 *BE -883-574
Bacteriostatic water filters - 88370C/50

FARB 28.11.74 BAYER AG B02 C02 D13 = RU --68-146
Alpha-(imidazolidinonyl carbonylamino) penicillins and cephalosporins 46019X/25
FARB 22.07.76 BAYER AG D15 J09 = GB 1581-264
Organically charged industrial waste salts treated by oxidn. - 08524A/05
FARB 08.03.78 BAYER AG A60 B02 C02 D22 = US 4235-774
Heterocyclyl-carbonylamino-acetamido-penicillin derivs. - 68416B/38
FARB 22.07.78 BAYER AG B03 C02 D13 = US 4235-888
Sisomycin-type pseudo-tri:saccharide cpds. - 09408C/06
FARB 21.05.79 BAYER AG A11 C04 D16 F09 (A81 A97) = DT 2920-525
Denatured polyaddition prod. from biomass and isocyanate - 86750C/49

FARB 21.05.79 BAYER AG A41 C04 D15 E14 =DT 2920-526
Accelerating sedimentation in waste water treatment - 86751C/49
FARB 25.05.79 BAYER AG A96 D22 E13 (E14) *DT 2921-163
Non-yellowing, weather resistant medical casts - 88504C/50
FARB 26.05.79 BAYER AG B04 C03 D16 *DT 2921-401
Antibiotic with herbicidal and fungicidal activity - 88524C/50
FARB 01.06.79 BAYER AG D18 E21 *DT 2922-482
Azo dyes for simultaneous tanning and dyeing of leather - 88578C/50
FARH 19.04.79 HOECHST AG C03 D13 =DK 8001-660
Alkaloid and lipoid cpd. extn. from ground lupin - 80976C/46
FARH 19.04.79 HOECHST AG C03 D13 =DK 8001-661
Removal of undesirable components from animal protein - 79256C/45
FARH 23.05.79 HOECHST AG A97 C04 D15 E36 *DT 2920-914
Waste-water sludge dewatering - 88489C/50
FARM 26.02.80 FARMITAL ERBA C SPA B03 D16 =GB 2048-245
Antitumour and antibacterial anthracycline glycoside antibiotic - 81122C/46
FARM- 23.11.76 FARMEC INTR PROD B05 D21 *RU --67-357
Anti-acne lotion - C/50
FERO 22.04.75 FERROSAN B03 D21 =US 4235-875
1-Alkyl-piperidines - 68788X/37
FILT- 05.02.77 FILTROX MASCH AG D18 J01 *CH -620-133
Filtering aid for coating filter - 88422C/50
FIRM 08.06.76 FIRMENICH SA D13 =CH -620-098
Prevention of flavour binding in textured protein - 83178C/47
FIRM 06.05.77 FIRMENICH SA D23 E15 (D13 D21 D25) *CH -620-099
3-Tert. butyl-cyclohexyl methyl-carbinol as perfume - 88421C/50
FIRM 16.05.77 FIRMENICH SA D23 E17 =CH -620-361
Bis:allylic ether(s) of propylene glycol - 88086A/49
FIRM 24.05.77 FIRMENICH SA A96 D23 =CH -620-120
Stabilisation of perfume materials - 82089A/46
FIRM 01.03.79 FIRMENICH SA D23 E14 =FR 2450-066
Aroma compsn. contg. cis- and trans cinnamaldehyde isomer mixt. - 66418C/38
FISK- 03.05.79 FISKERITEKN FORSKN D12 =GB 2048-051
Removal of fat, intestines etc. from fish - 84727C/48
FMCC 02.10.74 FMC CORP C03 D13 E13 (C04 D16) =CH -620-432
Cyanuric acid purificn from aminotriazine impurities - 28688X/16
FMCC 27.03.78 FMC CORP D15 *US 4235-719
Sewage oxygenation - 89928C/50
FMCC 02.04.79 FMC CORP B04 D16 J04 S03 =BR 8002-011
Device for delivering reagent(s) to a liq. assay medium - 77480C/44
FOOD- 20.08.70 FOOD TECHN INC D13 =J8 0045-170
Solid product prepn from maize syrup - 14427T/09
FORE- 28.09.77 INTR FOREST TRANSP D16 *RU --67-490
Resinous bark conversion into compost - C/50
FOSS- 07.08.78 FOSS N ELECTRIC A/S D13 J04 S03 S05 (W05) =US 4236-175
Infrared filter for multicomponent liq. mixtures, esp. milk - 14954C/09
FROM 28.02.79 BEL FROMAGERIES D13 =FR 2450-064
Decalcification of starting materials for soft cheese mfr. - 71912C/41
FUJI 27.07.76 FUJISAWA PHARM KK B05 D16 =GB 1580-899
Hydroxyamino-alk(en)yl-phosphonic acid (derivs.) - 84781Y/48

GCDE- 27.01.78 G-C DENTAL IND CORP A96 D21 =US 4235-633
Reactive dental mixt. hardening at room temp. - 58357B/32
GEMI- 18.10.76 GEN MINING & FINANC D16 E31 M25 =CA 1089-382
Bacterial oxidation of ferrous sulphate soln. - 32390A/18
GENO 15.09.76 GENERAL FOODS CORP D13 =CA 1089-283
Baked foods resembling fried article - 08200A/04
GENO 13.02.79 GENERAL FOODS CORP D15 (D17) *J5 5109-496
Treatment of waste water contg. starch etc. - 88811C/50
GENO 12.04.79 GENERAL FOODS CORP D13 E14 =J5 5138-362
Chewing gum having sweetness retention on prolonged storage - 58788C/34
GERK 27.07.76 GERLACH CHEM GMBH C03 D13 (D17) =GB 1580-912
Sheet material prepn. from beet root pulp, esp. sugar beet - 79455Y/45
GILL 20.04.79 GILLETTE CO A97 D21 E33 *GB 2048-229
Antiperspirant aluminium chlor:hydroxide(s) - 88776C/50
GLAS/ 29.12.75 GLASBY A G S D22 E11 *GB 1581-329
Hydro:fluosilicic acid salts of long chain amines - 88747C/50
GLYC- 30.05.78 GLYCO CHEMICALS INC D25 E13 F06 (E37) *US 4235-599
Textile bleaching at low washing temps. - 89876C/50
GONR- 02.03.79 GONDARD SA D14 S02 *FR 2450-448
Installation for measuring and mixing ingredients for animal feed - 88729C/50
GOUP/ 11.05.79 GOUPIL J D21 E13 #GB 2048-064
3-Hydroxy quinoline deodorising agent - 81122B/45
GRIN 03.05.76 GRINDSTED VAERKET A/S D11 =GB 1581-331
Monoglyceride phosphatide powder additive for bread etc. - 63105Y/36

HAAR 22.02.75 HAARMANN & REIMER GMBH D23 E14 (D21 D25) =CH -619
Stable dichloro-cyclopropane derivs. - 68932X/37
HAAR 25.05.79 HAARMANN & REIMER GMBH D23 E14 *DT 2921-139
Iso:camphoryl guaicol ethyl ether derivs. - 88500C/50

HAGI/ 07.10.71 HAGIWARA Y D13 (D11) =J4 8040-949
Improving nutrient value of beverages, bread, cakes etc. - 89356C/50
*HAGI/ 07.10.71 HAGIWARA Y D13 (D11) *J8 0045-176
Improving nutrient value of beverages, bread, cakes etc. - 89356C/50
*HAND/ 10.05.78 HANDELAND G A D15 *US 4235-849
Pellet dispenser for purifying well water - 89993C/50
*HANS- 10.07.78 HANSHIN ENG CO LTD D15 *US 4235-720
Underwater aerator producing circulation flow of water - 89929C/50
*HANS/ 11.05.79 HANSEN J C D16 *US 4235-963
Disposable appts. for sampling and identifying microorganisms - 90036C/50
HARV- 15.01.79 HARVARD COLLEGE D16 =SW 8000-297
Coupled gene with hybrid ribosomal binding site - 54646C/31
HAUN 26.11.77 HAUNI-WERKE KORBER KG D18 =US 4235-189
Applicator esp. for bronze powder to cigarette paper - 42574B/23
HAYB 03.03.73 HAYASHIBARA BIOCHEM D13 =J4 9110-861
Egg storage - 89352C/50
*HAYB 03.03.73 HAYASHIBARA BIOCHEM D13 *J8 0045-166
Egg storage - 89352C/50
*HEIT/ 01.06.79 HEITLAND S D21 *DT 2922-524
Dentifrice contg. agent for staining dental plaque - 88588C/50
HENK 02.09.72 HENKEL KG AUF AKTIEN D21 =DS 2243-281
After bath(e) skin compsn - 23145V/13
HENK 10.10.74 HENKEL KG AUF AKTIEN A97 D25 E37 =CH -620-175
Stable alumino or boro silicate suspensions contg. dispersants - 31842X/18
HENK 26.06.75 HENKEL KG AUF AKTIEN B04 C03 D16 (D13 D18 D25) =CH -620-471
Acid protease with wide pH activity range - 05072Y/03
HENK 09.07.75 HENKEL KG AUF AKTIEN D22 E17 (E19) =CH -620-096
Lower alkyl laurates as foam inhibitors - 05914Y/04
HENK 01.08.75 HENKEL KG AUF AKTIEN B05 C01 D15 E11 (D21 D23 D25) =CH -620-358
(1,3)-Diamino alkane-(1,1)-diphosphonic acids - 09300Y/06
HENK 01.08.75 HENKEL KG AUF AKTIEN B05 C01 D25 E11 (D23 D24) =CH -620-359
(1)-Hydroxy-(3)-amino alkane-(1,1)-diphosphonic acids - 09301Y/06
HENK 00.00.76 HENKEL KG AUF AKTIEN C03 D13 =US 4235-879
Animal feed with reduced nutrient content - 33691A/19
HENK 27.06.77 HENKEL KG AUF AKTIEN B03 C02 D13 (C03) =US 4235-880
Animal feeds contg. the antibiotic tylosin - 05435B/03
HENK 21.11.77 HENKEL KG AUF AKTIEN C03 D13 =US 4235-878
Growth-promoting animal feed - 40798B/22
HENK 22.12.77 HENKEL KG AUF AKTIEN D21 E19 =US 4236-022
Mono- and di:carboxylic acid 2-hydroxy-alkyl ester(s) - 51272B/28
HILL/ 19.09.77 HILL E J A96 D22 =GB 1581-026
Paediatric arm restraint - 21821B/11
*HITK 04.11.70 HITACHI METAL KK D15 J01 M14 *J8 0044-677
Treatment of mineral dust-contg. waste water with waste acid - 89334C/50
HLSI- 22.11.74 HLS LTD IND ENG CO D23 (D13) =DS 2552-311
Edible liquid oil prodn. - 30222X/17
HOEL 21.05.79 HORMEL G A & CO D12 #NL 7903-989
Animal carcass skinning machine - 84576C/48
HOFF 30.11.75 HOFFMANN-LA ROCHE AG C03 D13 =CH -620-345
Vitaminising animal feedstuffs - 40305Y/23
HOFF 29.11.76 HOFFMANN-LA ROCHE AG D21 E24 (E31) =GB 1581-377
Cosmetic compsn. esp. dry shampoo, contg. coloured cellulose - 38496A/22
HOFF 04.02.77 HOFFMANN-LA ROCHE AG B05 D16 =GB 1581-093
Anthracyclinone-type antibiotic SM-173B - 58746A/33
HONS 27.02.79 YAKULT HONSHA KK B04 D16 =FR 2450-108
Whole-cell antitumour agent - 65356C/37
HOWM- 14.05.76 HOWMEDICA INC D21 M26 =CH -620-474
Low value dental or jewellery alloy - 21622Y/12
HULL- 14.08.78 HULL-SMITH CHEM D13 =US 4235-937
Converting proteinaceous liq. into food additives - 15167C/09
HYDN 15.05.79 HYDRONAUTICS INC D15 =US 4235-723
Membrane module for reversed osmosis - 87640C/49
*HYDR- 10.10.78 HYDROTREAT INC D15 J03 X25 *US 4235-698
Water treatment to minimise scale formation - 89916C/50

ICIL 19.05.76 IMPERIAL CHEM INDS LTD B04 C03 D16 =SU -730-274
Aureolic acid type cpds. used as animal growth promoters - 82986Y/47
*ICIL 31.05.79 ICI AUSTRALIA LTD B02 C02 D16 (B04 C03) *BE -883-587
Improving ruminant response to Clostridium vaccines - 88372C/50
IDEK 00.00.74 IDEMITSU IND KK D16 E17 =J8 0045-191
Aerobic cultivation of micro-organism e.g. Nocardia corallina - 57818W/35
IDEK 13.04.79 IDEMITSU KOSAN KK C03 D22 E15 F06 =J5 5139-310
L-carvone as insect repellent and insecticide - 09493C/06
*INDK 29.05.79 IND WERKE KARLSRUHE AG D16 *DT 2921-709
Soil improver prodn. from pelletised refuse and sewage sludge - 88538C/50
INFL 07.08.73 INT FLAVORS & FRAGR INC D13 E13 =DS 2437-890
Thiafuran and furanthiol flavouring agents for food - 14727W/09
*INFL 27.01.78 INT FLAVORS & FRAGR INC D18 E15 *US 4235-247
Enhancing aroma or taste of smoking tobacco - 89848C/50

INFL

*INFL 20.10.78 INT FLAVORS & FRAGR INC B03 D13 E13 *US 4235-729
Augmenting perfume aroma of fabric softener compsns. - 89932C/50
*INFL 17.11.78 INT FLAVORS & FRAGR INC D13 E13 *US 4235-938
Bacon and caramel flavouring - 90024C/50
*INSC 06.09.75 INST CERC CHIMICO-FARMAC B04 D16 *RU --67-041
ICCF-DZ-323 Nocardia mutant - C/50
*INSC 01.03.76 INST CERC CHIMICO-FARMAC B05 D16 E16 *RU --64-795
1-Lysine prepn. by fermentation - C/50
INSE 02.10.74 INST NAT RECH CHIMIQUE A88 D15 J01 (A14) =DS 2544-117
Semi-permeable membranes of crosslinked, opt. substd. polyacrylamide - 28692X/16
INSP 28.02.79 INST PASTEUR D16 =FR 2450-262
Plasmid(s) contg. DNA fragment attached to operon - 91414B/51
INSS 10.04.79 SCHWEIZ SERUM IMPF B04 C03 D13 =GB 2048-066
Anti-rabies vaccine prodn. using heads only of bird embryos - 75328C/43
INTE- 10.01.77 INTEROX C03 D16 =GB 1581-403
Culture of aerobic microorganism for antibiotic and enzyme prodn. - 49683A/28
*INTE- 05.04.79 INTERGEN BEAUTY PRO A96 D21 *GB 2048-296
Prepn. of marbled soap - 88788C/50
*INTM 30.05.79 INT MINERALS & CHEM CORP B02 C02 D13 *DT 3020-470
Animal growth promoter zearalin derivs. - 88682C/50
*IOWA 02.05.78 IOWA STATE UNIV RES INC C03 D13 (D16) *US 4235-933
Prepn. of tri:glyceride oil contg. yeast cells - 90020C/50
ISHI- 20.12.77 ISHIGAKI KIKO CO LT D15 =CA 1089-287
Sewage sludge dewatering filter press - 47396B/26
*ISHI/ 18.04.79 ISHIDA Y D13 (D16) *J5 5138-368
Old rice treatment - 89047C/50

JAGA 28.05.76 JGC CORP D23 J01 =J8 0045-118
Deodorisation of oil and fat distillates - 05365A/03
*JILE/ 26.02.79 JILEK R D13 *CS 7901-276
Biological sorbents prepn. - C/50
*JOHJ 08.05.78 JOHNSON & JOHNSON D22 *US 4235-237
Absorbent article - 89845C/50
JOHO 13.02.78 JOHNSON MATTHEY LTD B04 D16 E31 J04 (S03) =US 4235-868
Osmium and ruthenium amine nitride complex salts - 63503B/35
*JULI/ 27.02.79 JULIEN A E E D13 *FR 2450-065
Extending shelf life of cheese having surface coating of nuts, etc. - 88698C/50

*KABI 21.06.78 KABI AB B04 D16 *US 4235-772
Growth promoting cystine or cysteine contg. polypeptide(s) - 89954C/50
KAIS/ 20.05.78 KAISER-WIRZ M A32 D14 F09 L02 (A81) =DT 2916-284
Mixing pourable powder or granules with liq. - 86413B/48
*KALU 19.01.76 KAZAN LENIN UNIV A96 B04 D16 *SU -730-690
Nuclease enzyme immobilised on soluble carrier - 89661C/50
KAMO/ 29.12.76 KAMO Y D15 =CA 1089-322
Sewage pump with vertical inlet conduit - 41292C/23
KANE 11.04.79 KANEBO KK A14 D21 E11 (A96 D22 E12) =J5 5137-178
Polymerisable (meth)acrylate or (meth)acrylamide deriv. bonding compsn - 79245C/45
*KANE 12.04.79 KANEBO KK A96 D21 *J5 5139-312
Two layer-type cleansing lotion - 89182C/50
*KANE 14.04.79 KANEBO KK D21 *J5 5139-314
Pasty emulsified cosmetic pack - 89184C/50
KANF 04.02.76 KANEGAFUCHI CHEM KK B05 D16 =J8 0045-195
D-(N)-carbamyl-phenyl-glycine derivs. prodn. - 39559A/22
KAOS 20.02.73 KAO SOAP KK D25 E19 (D22) =DS 2406-965
Powdered quaternary ammonium salts - 63453V/36
KAOS 11.09.75 KAO SOAP KK A96 C03 D22 E16 (D21) =CH -620-116
Microbicides and preservatives for e.g. cosmetics or cutting oils - 20394Y/12
KAOS 19.09.75 KAO SOAP KK C03 D22 E19 H08 =CH -620-337
Microbicidal sulphenyl, sulphinyl and sulphonyl acrylamide derivs. - 23885Y/14
KAOS 06.03.78 KAO SOAP KK A96 D21 E16 (A14 E17) =US 4235-898
Shampoo contg. anionic surfactant, alkanol:amide and polyacrylic acid - 66687B/37
KAOS 13.07.78 KAO SOAP KK A96 D21 E19 =US 4235-733
Soap contg. tri:chloro-hydroxy-di:phenyl ether antibacterial - 06033C/04
KAOS 28.02.79 KAO SOAP KK A96 D22 =FR 2450-070
Throwaway moisture permeable nappy - 64393C/37
*KAOS 12.04.79 KAO SOAP KK A96 D22 G03 (A81) *J5 5137-201
Disposable napkin comprising three layer pad - 88845C/50
*KAOS 16.04.79 KAO SOAP KK A95 D15 E16 H06 (H09) *J5 5139-494
Sludge-contg. mixed fuel - 89299C/50
*KAOS 16.04.79 KAO SOAP KK A95 D15 E16 H06 (H09) *J5 5139-495
Sludge-contg. mixed fuel compsn. - 89300C/50
*KAOS 19.04.79 KAO SOAP KK D25 E19 (E37) *J5 5139-500
Storage stable bleaching agent compsn. - 89301C/50
*KATS 23.05.79 KATSUTA H B04 C03 D16 *WP 8002-504
Vaccine contg. genetically attenuated bacteria - 90100C/50

*KDFO= 10.01.77 KRASD FOOD IND RES D14 J01 S03 *SU -729-473
Liquid sampler for use during prodn. of crystals by evapn. in vacuo - 89453C/50
KEEF/ 06.04.79 KEEFER B G D15 =GB 2048-372
Reverse osmosis water purifcn. with pressurisation by reciprocating p - 79335C/45
*KELD/ 23.02.79 KELDER C D22 F05 S05 *US 4235-177
Lock-stitch suturing machine with oscillating curved needle - 89835C/50
KEMA 10.05.77 KEMANOBEL AB C03 D22 E19 F09 =GB 1581-205
Fungicidal preparations for e.g. wood preservatives - 91648A/51
KEMP/ 14.04.79 KEMPER K D11 =GB 2048-159
Dough dividing and portioning machine - 75560C/43
KENT/ 03.05.79 KENT F M J D23 =GB 2048-300
Multipart decorative candle - 83071C/47
KEYS- 01.11.77 KEYSTONE FOODS CORP D12 =US 4235-941
Densified frozen, meat-fibre slices with surface grooves - 35699B/19
*KIKK 17.04.79 KIKKOMAN SHOYU KK D13 *J5 5138-371
Flavouring compsn. prepn. - 89048C/50
KIRI 18.08.73 KIRIN BREWERY KK B02 D16 =J8 0045-197
Adenosine triphosphate prodn. - 57811W/35
KIRI 11.12.76 KIRIN BEER KK D16 =CA 1089-381
Brewers wort prepn. - 47091A/26
KIRS/ 28.04.76 KIRSCHMAN F C D15 =CA 1089-402
Compact home water distiller - 49536A/27
KITA 02.04.76 KITASATO RES INST B04 C03 D16 =J8 0045-045
Poultry coliform bacillus inactivated vaccine - 82173Y/46
*KLOH 30.05.79 KLOCKNER-HUMBOLDT-DEUTZ D16 *DT 2921-918
Biological sewage treatment optimisation - 88549C/50
KNUT/ 18.04.79 KNUTSON R A A96 B05 C03 D22 =GB 2048-070
Antibacterial, antifungal compsn. for treating wounds, burns etc. - 62309C/36
KONN 22.05.79 GIST-BROCADES NV B04 C03 D13 =WP 8002-505
Combined vaccine for poultry - 35879C/20
*KOPP- 23.05.79 KOPPENS MACHINEFABR D13 *DT 3008-503
Moulding croquettes - 88609C/50
KOPP- 23.05.79 KOPPENS MACH FABR D13 =NL 7904-048
Moulding croquettes - 88609C/50
*KORB- 27.03.78 KORBEL F & BROS D16 *US 4235-940
Riddling wines fermented in bottles - 90026C/50
KOWA 16.04.79 KOWA KK B02 D16 =DK 8001-618
Aza:bi:cycloheptane-carboxylic acid derivs. - 80122C/45
KOWA 16.04.79 KOWA KK B02 D16 =J5 5139-380
Aza:bi:cycloheptane-carboxylic acid derivs. - 80122C/45
KOYA/ 19.07.77 KOYAMA N D12 =US 4234-997
Animal carcass splitting machine - 10222B/06
KRFT 27.04.77 KRAFT INC D13 =CA 1089-286
Salad dressing protection against yeasts and moulds - 61931A/35
KRUC- 18.07.75 KRUCHEN-BETTEN BETT D18 =CA 1089-160
Cleaning poultry feathers with chlorinated hydrocarbons - 07461Y/05
KURE 29.10.75 KUREHA CHEM IND KK A97 D12 F09 (A14 A17) =J8 0045-164
Smokeable casing material for meat - 42300Y/24
KURE 07.07.76 KUREHA CHEM IND KK B04 D16 =SU -730-277
Antitumour nitrogen contg. polysaccharides prodn. - 70692Y/40
KURE 27.01.77 KUREHA KAGAKU KOGYO B04 D16 =GB 1581-315
Antitumour and immuno:potentiating D-glucose polysaccharide - 60745A/34
KURK 04.02.77 KURITA KIKAI SEISAK D15 =J5 3097-673
Filter press for treating waste water - 89332C/50
*KURK 04.02.77 KURITA KIKAI SEISAK D15 *J8 0044-652
Filter press for treating waste water - 89332C/50
KYOW 09.06.69 KYOWA HAKKO KOGYO KK B05 D16 =J8 0044-597
L-lysine prepn - 92987R/50
*KYOW 08.06.70 KYOWA HAKKO KOGYO KK B05 D16 *J8 0045-196
Prodn of 3-(3,4-di:hydroxy phenyl)-L-N-acyl alanine (L-N-acyl DOPA) - 89358C/50
KYOW 14.04.79 KYOWA HAKKO KOGYO KK B02 D16 =J5 5138-396
2-Carboxy-7-substd. acetamido-8-oxo-1 aza:bi:cyclo-octene derivs. - 60870C/35

LAMP/ 09.05.75 LAMPL H C04 D16 (D15) =CH -620-409
Stable soil improvement material - 87189X/47
*LASO/ 06.07.79 LASOVSKY J D16 *CS 7904-785
Enzyme fixing and separation - C/50
*LASO/ 06.07.79 LASOVSKY J D16 *CS 7904-786
Microorganisms adsorption on solid carrier - C/50
LCHO 06.12.76 CHOAY SA B04 D16 J04 S03 =GB 1581-254
Test pack for affinity chromatography sepn. and determn. - 42474A/24
*LEBA= 21.11.77 LENGD BAKING IND RES D11 (D16) *SU -730-334
Leaven for mfr. of wheat or rye bread - 89479C/50
LEHM/ 08.07.77 LEHMANN W D15 E36 =DS 2730-883
Chlorine-free aq. chlorine di:oxide soln. prepn. - 04332B/03
*LESC- 11.05.79 LESCARDEN LTD B04 D13 (B07 D21) *WP 8002-501
Cartilage prod. obtd. by extracting with water and concn. - 90097C/50
*LIGG- 21.02.79 LIGGETT GROUP INC D18 *US 4235-251
Deposition of palladium on smokable tobacco - 89849C/50

*LIOC 14.04.79 LION DENTIFRICE KK A96 D21 *J5 5139-317
Hair-dressing agent - 89187C/50
*LIOC 17.04.79 LION DENTIFRICE KK D21 E11 *J5 5139-311
Dental cement suppressing sec. decay - 89181C/50
LIOY 29.07.75 LION FAT & OIL KK A17 D21 F06 H07 (A96 A97) =J8 0045-047
Polyolefin oils prepn. - 14934Y/09
LIOY 07.06.78 LION FAT & OIL KK A97 D21 (A25) =US 4235-759
Liq. cleaning compsns. with anionic and cationic surfactant components - 08287C/05
*LIST/ 16.05.79 LIST J D16 *CS 7903-351
Defoaming agent for fermentation industry - C/50
LITT 09.08.76 LITTLE A D INC A32 D22 (A94) =GB 1581-033
Sponge-like compsn. which releases liquid when under pressure - 14362A/08
LKBP 29.06.78 LKB PRODUKTER AB B04 D16 S03 S05 =US 4235-961
Creatine kinase sub-unit M determn. by emission photometry - 03721C/03
*LMEA= 18.09.78 LATV MEAT DAIRY IND MIN D13 (D16) *SU -730-336
Lactic flora bacterial starter for cheddar-type cheese mfr. - 89481C/50
LOPE/ 03.07.78 LOPEZ F D15 #US 4235-718
Sequenced distribution valve for regeneration of ion exchange plant - 73179A/41

*MACH/ 10.05.79 MACHO V D13 *CS 7903-194
Silage material and/or feedstuff prepn. - C/50
*MALO- 09.05.79 MALORDEAN LTD D13 *GB 2048-048
Potato chip - 88755C/50
*MASI 16.04.79 MASSACHUSETTS INST TECH B04 D16 *WP 8002-296
Detecting cancer by assaying galactosyl transferase - 90091C/50
MATW 13.07.72 MATSUSHITA ELEC WORKS D21 E17 (E14) =J4 9028-458
Heat regenerative type hair curling compsn. - 89359C/50
*MATW 13.07.72 MATSUSHITA ELEC WORKS D21 E17 (E14) *J8 0045-202
Heat regenerative type hair curling compsn. - 89359C/50
MATW 04.10.72 MATSUSHITA ELEC WORKS D21 E14 =J4 9057-958
Heat regenerative cpd(s) used in curling of human hair - 89360C/50
*MATW 04.10.72 MATSUSHITA ELEC WORKS D21 E14 *J8 0045-203
Heat regenerative cpd(s) used in curling of human hair - 89360C/50
*MCKE/ 17.03.78 MCKEEN J E D15 *US 4235-678
Solar still with separate condensation sphere - 89907C/50
*MEDI- 29.07.77 MEDICAL COLL WISCON B04 D16 J04 S03 (S05) *US 4235-960
Competitive enzyme linked immunoassay - 90034C/50
*MEDI- 27.07.78 MEDI-TECH INC A96 B04 D16 *US 4235-244
Microbiological sampling device - 89847C/50
*MEDL/ 04.05.79 MEDLINE AB A96 D22 *WP 8002-369
Device for closing body passages, esp. for use as contraceptive - 90094C/50
MEIJ 05.06.72 MEIJI SEIKA KAISHA D16 E13 =J4 9018-640
Cultivation of edible mushrooms using wood powder - 89388C/50
*MEIJ 05.06.72 MEIJI SEIKA KAISHA D16 E13 *J8 0045-524
Cultivation of edible mushrooms using wood powder - 89388C/50
MEIJ 28.06.73 MEIJI CONF B04 D16 =J8 0045-194
Antibiotic SF-1508 prepd from Streptomyces hygroscopicus - 45158W/27
MEIJ 11.12.76 MEIJI SEIKA KAISHA D16 =CA 1089-381
Brewers wort prepn. - 47091A/26
MEIJ 31.10.77 MEIJI SEIKA KAISHA B04 D16 =US 4235-883
Antibiotic BN-213 with antibacterial activity - 35651B/19
*MERI 21.11.75 MERCK & CO INC B02 C02 D22 (D16) *US 4235-967
Prodn. of antibiotics 890 A1 and 890 A3 - 90038C/50
MERI 05.05.77 MERCK & CO INC B02 C02 D22 (D13) =US 4235-917
N-Substd.-N-acyl-thienamycin derivs. - 80170A/45
*MERI 01.08.77 MERCK & CO INC B04 D16 *US 4235-994
Antigen meningococcal polysaccharide - 90051C/50
*MERI 26.03.79 MERCK & CO INC B04 D16 *US 4235-877
Liposome contg. viral or bacterial sub-unit antigen - 90005C/50
MERI 19.04.79 MERCK & CO INC B02 C02 D13 E13 =DK 8001-652
2-Substd-1-carba-de:thia-pen-2-em-3-carboxylic acid derivs. - 79267C/45
MERI 21.05.79 MERCK & CO INC B02 C03 D16 E13 (D13) #DT 2920-592
Recovery of purified riboflavin from fermentation broths - 66229B/36
*MESP 27.07.79 MEDICAL SPECIALITIES INC A96 D22 *US 4235-228
Unitary orthopaedic cast material - 89840C/50
METB 01.04.77 METAL BOX CO LTD D22 =GB 1581-356
Communal waste disposal system for hospital - 11000C/06
*METT 08.08.79 M & T CHEMICALS INC A60 D15 E11 G02 (A26) *BE -884-652
Phenoxy-alkyl tri:alkoxy-silane - 88403C/50
*MICA/ 26.02.79 MICAN P C03 D13 *CS 7901-262
Protibiotic additive for feedstuffs - C/50
*MICH/ 19.10.79 MICHEK V D15 *CS 7907-103
Filter for water processing - C/50
*MIKO/ 09.10.79 MIKODA J D15 J01 *CS 7906-846
Waste sludges processing - C/50
*MILC- 07.12.77 ZENTRALSCHWEIZ MILC D13 *US 4235-934
Prodn. of sterile yoghurt of long storage life - 90021C/50
*MIND/ 12.06.79 MINDERMANN F D15 M24 *DS 2923-726
Utilisation of activated sludge - 88437C/50

MINN 12.05.76 MINNESOTA MINING CO A96 D22 F07 =GB 1581-162
Disposable, multi-ply, sanitary pad and clothing protector - 83313Y/47
*MIRA- 26.09.77 MIRAJ INTR PROD COS D21 E19 *RU --67-788
Face cleansing emulsion - C/50
*MIRA- 26.09.77 MIRAJ INTR PROD COS D21 *RU --67-789
Cream shampoo compsn. - C/50
*MIRA- 26.09.77 MIRAJ INTR PROD COS D21 E19 *RU --67-790
Cosmetic cream - C/50
*MIRA- 26.09.77 MIRAJ INTR PROD COS D21 E19 *RU --67-795
Capillary lotion - C/50
*MIRA- 26.09.77 MIRAJ INTR PROD COS D25 E19 *RU --67-797
Detergent compsn. - C/50
*MIST 17.04.79 MITSUBISHI ACETATE D18 J01 *J5 5138-385
Filter for tobacco - 89049C/50
MITB 24.04.78 MITSUI SHIPBUILDING ENGG D16 =J5 4140-269
Appts. for removing bubbles e.g. from cultures of microorganisms - 89331C/50
*MITB 24.04.78 MITSUI SHIPBUILDING ENGG D16 *J8 0044-651
Appts. for removing bubbles e.g. from cultures of microorganisms - 89331C/50
MITK 09.05.79 MITSUI TOATSU CHEM INC B02 D16 E13 =GB 2048-266
L-Tryptophan prodn. from D.L- or D-serine - 85628C/48
*MITR 05.04.79 MITSUBISHI RAYON KK A94 D22 F01 (A18 A28 A60 F06) *J5 5137-210
Sterilising fibre for socks, insoles etc. - 88849C/50
*MITR 17.04.79 MITSUBISHI RAYON KK D18 J01 *J5 5138-385
Filter for tobacco - 89049C/50
MITS 07.03.75 MITSUBISHI CORP D18 E19 (E34) =J5 1104-001
Preserving leather in sealed container - 89341C/50
*MITS 07.03.75 MITSUBISHI CORP D18 E19 (E34) *J8 0044-799
Preserving leather in sealed container - 89341C/50
*MITU 13.04.79 MITSUBISHI CHEM IND KK B01 D16 *J5 5138-394
Fermentative prepn. of androstane - 89053C/50
*MITU 13.04.79 MITSUBISHI CHEM IND KK B01 D16 *J5 5138-395
Fermentative prepn. of androstane(s) - 89054C/50
MOCH 30.09.76 MOCHIDA SEIYAKU KK B04 D16 J04 S03 (S05) =DS 2743-444
Immunochemical assay using labelled antibody - 27221A/15
*MOFO= 11.02.77 MOSC FOOD IND RES D11 E17 (D13) *SU -730-678
Prodn. of stearoyl-butyric acid food surfactant prodn. - 89649C/50
MOTE= 27.02.79 MOSC TEXTILE INST A11 D15 F06 J01 (A91 D17) #FR 2450-265
Graft copolymers of vinyl monomers onto cellulose or protein fibres - 59837C/34
MRSC 17.06.76 MARS INC C03 D13 =CA 1089-285
Stabilisation of protein foodstuff of high water content - 90052Y/51
MTSI- 14.08.75 MT SINAI SCHOOL MED B04 D16 S03 S05 =CA 1089-359
Blood group determination - 11160Y/07

NAAR 27.07.76 NAARDEN INT NV D23 E16 =US 4235-824
(2,6)-Nona:di:enyl nitrile as perfume component - 08297A/05
NAGA- 02.08.77 NAGANO MISO KK D13 =J8 0044-587
High protein food prepn. - 28590B/15
*NAGA- 18.04.79 NAGAOKA KORYO KK D23 E17 *J5 5139-340
Methyl 2-acetonyl-2-acetonyl-2-tetra:decene-13-inoate - 89202C/50
NALC 06.11.74 NALCO CHEMICAL CO D15 E11 M14 #DS 2453-107
Phospho-ester scale and corrosion inhibitor - 23962W/14
*NATH/ 18.05.79 NATH G A35 D21 S05 (A96) *DT 2920-204
Dental plastic polymerisation - 88454C/50
NATR 09.07.75 NATIONAL RES DEV CORP A41 D21 E13 (A96) =CH -620-233
Triazines contg. reactive halogen and amine bonded alkenyl - 09707Y/06
NATR 30.04.80 NATIONAL RES DEV CORP B04 D16 =GB 2048-302
Rapid identification of bacteria - 83066C/47
NATT 26.04.79 NAT STARCH & CHEM CORP A81 D22 G03 (A14 A96) =GB 2048-274
Pressure sensitive fusible adhesive prepn. - 62324C/36
NATT 29.05.79 NAT STARCH & CHEM CORP D17 (D13) =DT 3016-517
Modified tapioca starch forming gel in cold water - 67780C/39
NATW 27.04.77 NATTERMANN A & CIE GMBH B04 D13 (D21 D23) =US 4235-793
Purified phosphatidyl-choline or lecithin oils - 63459A/36
NELS/ 16.04.79 NELSON R W C03 D13 (D16) =DK 7903-486
Stable liq. animal feed emulsions - 80119C/45
NEST 27.05.76 SOC PROD NESTLE SA B02 D13 =CH -620-344
Extracting caffeine from aqueous extract with fatty liquid - 82949Y/47
NEST 17.03.77 MAGGI K AG D13 =CH -620-347
Ultrafiltration of vegetable acid hydrolysate - 65264A/37
*NEWC- 22.05.74 SHIN COSMOS DENKI D15 E36 J04 *J8 0044-907
Measuring chlorine concn. of e.g. sterilised water - 89347C/50
NICA 28.10.78 NIPPON CARBIDE KOGY KK A97 D16 E13 (D13) =US 4235-043
Cultivation of algae - 34956C/20
*NICH- 11.04.79 NICHIBI KK A14 D16 F01 J01 (A32) *J5 5137-212
Prodn. of very fine PVA fibre - 88851C/50
NIIG 19.03.77 NIIGATA ENG KK D15 =CA 1089-573
Purifying waste waters contg. cyanide ions - 69164A/39
*NIKO= 10.08.77 NIKOLAEV ALYE PARUS D23 *SU -730-798
Compsn. for mfr. of perfume and cologne water - 89753C/50
NIOF 16.10.72 NIPPON OILS & FATS KK D23 E17 =J8 0044-797
Fatty acid 2-stage purifcn. - 70247V/40

NIPC

NIPC 17.09.74 NIPPON CHEM IND KK A60 C02 D22 = J8 0044-800
Methyl 2-benzimidazole carbomates, broad spectrum fungicides - 95133X/51
*NIRA 23.05.79 UNITIKA KK D16 *DT 3019-254
Continuous culture of bacteria for acetate kinase prodn. - 88643C/50
NISW 17.01.72 NISSHIN OIL MILLS KK D13 = J4 8075-759
Soybean milk beverage prepn. - 89353C/50
*NISW 17.01.72 NISSHIN OIL MILLS KK D13 *J8 0045-168
Soybean milk beverage prepn. - 89353C/50
NISW 25.03.76 NISSHIN OIL MILLS KK D23 = J8 0045-119
Removal of fat or oil from clay used in decolourisation - 80243Y/45
NITN 05.07.78 NIHON TOKUSHO NOYAK C01 D22 = US 4235-891
O-Poly:haloalkyl-O,S-di:alkyl phosphono:thiolate derivs. - 05746C/04
*NKKC 05.04.79 NIKKA KAGAKU KOGVO KK D23 F06 *J5 5137-272
Softening creped cloth - 88874C/50
*NMHB 18.04.80 NORDISCH MASCH R BAADER D12 *DS 3014-936
Double fish fillet skinning machine - 88441C/50
NODA 26.03.75 NODA INST SCI RES D13 = J5 1112-597
Molecular sieving soya sauce to improve colour stability - 89326C/50
*NODA 26.03.75 NODA INST SCI RES D13 *J8 0044-590
Molecular sieving soya sauce to improve colour stability - 89326C/50
*NODP 03.03.79 NODA PLYWOOD MFG KK A81 C03 D22 F09 *J5 5117-611
Prodn. of plywood impregnated with insect control agent - 88819C/50
*NOVA/ 17.05.79 NOVAK Z D15 E36 *CS 7903-434
Elimination of residual ozone from water - C/50
NOVE- 29.03.79 NOVEX TALALMANYFEJL D15 J01 = GB 2048-100
Purificn. of impure effluent streams - 71816C/41
*NOVO= 27.06.77 NOVOMOSKVA AEROSOL A97 D25 *SU -730-800
Water-based aerosol textile cleanser - 89755C/50

OKIG- 30.07.76 OKI GUM KOGYO KK D15 = J5 3016-455
Sterilisation of water and sewage - 89369C/50
*OKIG- 30.07.76 OKI GUM KOGYO KK D15 *J8 0045-276
Sterilisation of water and sewage - 89369C/50
OLIN 21.05.79 OLIN CORP A97 D25 = NL 8002-675
Novel alkoxy bis:tri:alkoxy:siloxy silane polymer surfactants - 69594C/40
*ORAA- 03.08.79 O R A A B04 C03 D13 *BE -884-610
Dried colostrum - 88392C/50
OREA 14.06.68 L'OREAL SA D21 E19 E24 = DS 1921-911
Hair dye - 14010R/09
OREA 07.11.69 L'OREAL SA A16 D22 (A17 A92 A96) = DS 2054-293
Catamerical tampon and holder - 30213S/17
OREA 12.08.74 L'OREAL SA D21 E17 = DT 2560-263
Cosmetics contg. alkane-1,2-diol deriv excipients - 17249X/10
OREA 26.06.75 L'OREAL SA D21 E24 = DS 2628-641
Oxidising hair dyeing compsns. - 04270Y/03
OREA 15.10.75 L'OREAL SA A96 D21 = CH -620-115
Cosmetics contg. polymers of unsatd. cpds. with hydroxylic cpds. - 27146Y/16
OREA 27.02.79 L'OREAL SA A96 D21 = FR 2450-105
Keratin material treatment with shampoos and lotions - 64466C/37
ORON- 31.05.79 ORONZIO DE NORA IMP D15 E36 J03 #DT 2922-275
Halogenation of water - 82412B/45
ORTH 26.04.79 ORTHO PHARM CORP B04 D16 S03 (S05) = NO 8001-214
Mono:clonal antibody produced by hybrid cell line - 83055C/47
ORTH 26.04.79 ORTHO PHARM CORP B04 D16 S03 (S05) = NO 8001-216
Mono:clonal antibody to human helper T cells - 83054C/47
OSHI- 13.12.77 OSHIKA SHINKO KK C03 D22 E36 F09 = J8 0045-361
Bleaching method for wood, board etc. - 60517B/33
*OSTE/ 16.05.79 OSTER G B04 D16 S03 (S05) *WP 8002-596
Detecting impending ovulation by testing for peroxidase - 90129C/50
*OTAT/ 16.04.79 OTA T D13 *J5 5139-315
Stable emulsion for use in salad dressing and cake preservative - 89185C/50

PENT- 11.05.79 PENTAPHARM AG B05 D16 J04 = WP 8002-559
Tri:peptide derivs. with C-terminal chromophore gp. - 86899C/49
PERC 18.11.74 PERMACHEM ASIA LTD B01 D16 = J8 0044-598
16 Alpha hydroxy-dehydro-epi-androsterone prepn - 51046X/27
PERS 07.12.73 PERSONAL PRODUCTS CO A11 D22 (A96) #RU --66-241
Highly water-absorbent grafted cellulose fibre - 44101W/26
*PETL 12.08.76 PETROLITE CORP C01 D15 E11 M14 *US 4235-809
Alpha-amino-phosphonic acid prepn. - 89973C/50
PEUS/ 29.01.79 PEUSER M F X D15 J01 M11 = NL 8020-027
Effluent treatment of electroplating baths - 43314C/25
PFIZ 28.08.75 PFIZER INC B03 C02 D13 E13 (D23) = NL 8004-974
(3)-Hydroxy gamma:pyrones prepn. - 11094Y/07
PFIZ 26.11.76 PFIZER INC B02 D16 = CA 1089-383
6-APA prepn. by enzymatic deacylation of penicillin cpds. - 38479A/22
PFIZ 16.12.77 PFIZER INC B03 D13 E13 = J8 0045-546
Erythorbic and ascorbic acid 6-fatty acid mon:ester prepn - 45702B/25
PFIZ 15.09.78 PFIZER INC B04 D16 S03 T01 = US 4236-211
Determn. of Minimum Inhibitory Concn. of antimicrobials - 36923C/21

PFIZ 19.04.79 PFIZER INC B05 D16 = DK 8001-646
High yield prepn. of 2,3-di:hydroxy-benzoate - 62215C/35
PHAS 24.02.75 PHARMASCIENCE LABS B05 C03 D22 E16 = CA 1089-493
Antimicrobial amino-substd. 2-alkanol derivs - 69038X/37
PHIM 10.01.78 PHILIP MORRIS INC A97 D18 E19 = CA 1089-210
Tobacco contg. non-volatile polymer of isopropenyl ester - 55674B/30
PHIM 29.03.78 PHILIP MORRIS INC D18 = US 4235-250
Expanding tobacco to increase its filling capacity - 56315B/31
PILI/ 24.08.78 PILIPSKI M D17 E13 F09 (D16 E17) = US 4235-968
Saccharification of cellulosic materials - 20669C/12
POLA 12.06.73 POLAK'S FRUTAL WORKS INC B07 C03 D21 J04 (D25) = CH -620-135
Encapsulated oil globules - 00919W/01
POLA 20.03.78 POLAK'S FRUTAL WORKS INC D23 E15 (D21 D25) = US 4235-805
Nitrile cpds. with a 1-methyl-4 isopropyl:cyclohexane carbon skeleton 69926B/39
*POPL 07.05.79 POLYPLASTIC A92 D18 *GB 2048-037
Vessel for mushroom cultivation - 88753C/50
*POTA= 13.04.78 POTATO PRODS RES D13 *SU -730-339
Granulated dry mashed vegetables e.g. potatoes - 89484C/50
POUE 29.12.77 POUDRES & EXPLOSIFS D23 E14 = US 4236-029
Prepn. of 2,4-di:nitro-6-tert. butyl-3-methyl-anisole - 53863B/29
PROC 23.06.75 PROCTER & GAMBLE CO B05 D21 E14 = CH -620-117
Bis biguanides for use in compsns. for tooth care - 03257Y/02
PROC 28.03.77 PROCTER & GAMBLE CO D21 E19 = CA 1089-367
Hair conditioning agent e.g. quat. ammonium salt - 70786A/40
PROC 08.02.78 PROCTER & GAMBLE CO D22 = US 4235-732
Liq. cleaning compsn. with high storage stability - 61820B/34
*PROC 29.11.78 PROCTER & GAMBLE CO A96 D22 *J5 5108-358
Water absorbing foamed material for tampons etc. - 88809C/50

*QUAK 23.02.78 QUAKER OATS CO D12 *US 4235-935
Bacon analogue giving realistic appearance - 90022C/50
*QUAK 01.08.79 QUAKER OATS CO C03 D13 *BE -884-573
Solidification of food particles - 88385C/50

*RAJN/ 29.05.79 RAJNOCH M D14 *CS 7903-696
Trimming device for beetroot, sugar beetroot, etc. - C/50
*RANC/ 27.02.79 RANCE P D11 *FR 2450-420
Small scale traditional style oven - 88726C/50
*REFR- 01.03.79 INST RECH FRUITS AGRUMES D13 *FR 2450-067
Industrial cryogenic shelling of cashew and similar nuts - 88699C/50
*REIN/ 31.05.79 REINSTORFF D A96 B04 D16 E12 *DT 2922-118
Solns. of triquinoyl, its radicals or polymers prodn. - 88558C/50
*RESE 21.01.77 RESEARCH CORP B04 D16 K08 S03 (S05) *US 4235-864
Immunoassay for detection of cocaine metabolite in sample - 90000C/50
*RESE 23.05.79 RESEARCH CORP B04 C03 D16 *WP 8002-504
Vaccine contg. genetically attenuated bacteria - 90100C/50
RETO 11.04.79 RJR ARCHER INC A97 D18 G03 (A81) = BR 8002-154
Tipping paper for air Ventilated cigarette - 79202C/45
RHEO- 24.05.79 RHEON AUTO MACH D11 = NL 8002-967
Dough pieces alignment - 86678C/49
RHON 14.04.76 RHONE-POULENC INDUSTRIES A14 D15 (A97) = GB 1581-178
Water soluble, high mol. wt. acrylic (co)polymers - 74153Y/42
RHON 05.04.79 RHONE-POULENC INDUSTRIES A97 C03 D16 = BR 8002-025
Microorganisms included in crosslinked polysaccharide gel - 77546C/44
RHON 18.04.79 RHONE-POULENC INDUSTRIES B04 D16 = DK 8001-639
Immunostimulant 41200RP - 77067C/44
*RICH- 28.01.77 RICH PRODUCTS CORP D13 *US 4235-936
Frozen beverage concentrates flowable at freezer temps. - 90023C/50
*ROBO/ 27.02.79 ROBOUAM F D13 *FR 2450-053
Transfer mechanisms to load and discharge Camembert salting machine - 88694C/50
RORE 24.06.76 RORER W H INC A96 D21 #FR 2450-107
Aq. pharmaceutical detergent compsn. - 29676B/15
ROSS/ 24.04.79 ROSSI J C03 D13 = NO 8001-150
Detoxicating and/or taste-improving plant seed oil feedstuff treatment - 81117C/46
ROSS/ 24.04.79 ROSSI J C03 D13 = SW 8003-084
Detoxicating and/or taste-improving plant seed oil feedstuff treatment - 81117C/46
ROTK- 20.12.71 VEB ROTKAPPCHEN-SEK D16 = DS 2220-648
Coffee-contg sparkling wine - 06745U/06
*RUHR 28.05.79 RUHRCHEMIE AG D23 E15 *DT 2921-619
2-Methylene-butanal derivs., useful as perfumes - 88533C/50
RUPE- 09.05.77 RUPERTS CERTI-FRESH D13 = GB 1581-322
Contacting raw battered food prods. with carbon di:oxide snow - 19976B/10
*RYDE- 27.10.78 RYDER INT CORP D22 S05 X25 *US 4235-842
Contact lens disinfection - 89989C/50

*SAGE/ 02.03.79 SAGE J D15 *FR 2450-237
Packaged multistage treatment plant for domestic sewage, etc. 88716C/50

SALK/ 17.03.78 SALKIN N A96 C03 D22 (A14) = US 4235-884
PVP-halogen complex prepn. as stable aq. soln. - 70288B/39
SAOC 07.04.79 SANRAKU OCEAN A11 D16 (D17) = J5 5138-390
Cyclodextrin prodn. from starch or degraded starch - 77429C/44
SARP- 20.02.76 SARPAP SOC APPL REC C03 D22 E19 F09 *FR 2450-059
Aqueous wood protecting fungicidal and insect repelling compsn. - 88695C/50
SATA- 10.08.79 SATAKE ENGG CO LTD D13 *BE -884-693
Moisturising polished rice without risk of cracking grains - 88415C/50
SATO/ 11.04.79 SATO I C03 D16 *J5 5137-186
Soil improving compsn. - 88841C/50
SAUE 17.04.76 SAUERBRUCH BOTTGER KG A11 D21 = DS 2616-939
Soluble collagen prodn. for use in cosmetics - 76135Y/43
SAUR/ 17.03.78 SAURIN W D12 = FR 2450-063
Prodn. of sausages etc. with different internal portion - 72187B/40
SCHA/ 24.09.76 SCHANZE R C03 D13 = GB 1581-281
Feed or feed additives for cattle from agricultural waste - 12320A/07
SCHD 31.05.79 SCHERING AG B04 D16 *DT 2922-496
Protein cpds. e.g. hormones isolation from fusion proteins - 88581C/50
SCMZ 26.09.78 SCM CORP D23 *US 4235-796
Fractional crystallisation of lipid(s) - 89964C/50
SEAR 01.06.79 SEARLE G D & CO B04 D16 *BE -883-564
Plasmids useful as vectors for eucaryotic DNA - 88368C/50
SEIS 12.04.79 SEISAN KAIHATSU KAGAKU D16 *J5 5138-388
Cultivating Rhodopseudomonas microorganism - 89050C/50
SELW- 30.05.79 SELWIG & LANGE MASC D17 J01 *DT 2921-871
Lime mud press - 88546C/50
SHAR/ 09.11.78 SHARAPOV V I D15 *SU -731-202
Heat supply unit for water heating boiler - 89787C/50
SHAW- 10.07.76 SHAWS HUDDERSFIELD D13 *GB 1581-339
Food substances prepn. for pickling - 88748C/50
SHEL 03.04.79 SHELL INT RES MIJ BV D15 H07 J01 = BR 8002-026
Breaking water-oil emulsions - 77438C/44
SHIN- 16.04.79 SHINKA SHOKUHIN KK D11 (D16) *J5 5138-352
Bread with improved taste, volume, appearance, texture etc. - 89046C/50
SHIO 13.04.79 SHIONOGI KK B04 D16 = J5 5138-391
B30-threonine insulin prepn. - 79246C/45
SHIO 13.04.79 SHIONOGI KK B04 D16 = J5 5138-393
B30-threonine insulin prepn. - 79246C/45
SICK/ 22.05.79 SICK P D15 *DT 2920-737
Regenerating effluents from bottle washing machines - 88478C/50
SKIM- 23.04.76 SKIMOVEX BV D15 = GB 1581-138
Gravity settler with many narrow channels - 75876Y/43
SLAG- 16.05.79 SLAGTERIERNES FORSK D12 S03 X25 *WP 8002-597
Detecting boar taint in carcasses of non castrated boars - 90130C/50
SMIK 25.04.77 SMITHKLINE-RIT B04 C03 D16 = US 4235-876
Fowl pest vaccine - 77499Y/44
SMIN 00.00.80 SMITH & NEPHEW RES A96 D22 = GB 2048-120
Liq. impervious sheet for covering wounds - 38715C/22
SNAM 03.12.75 SNAMPROGETTI SPA D15 H03 = SU -730-294
Biological treatment of oil pollution in sea water etc. - 39853Y/23
SOEI- 18.04.79 SOEI KK A97 D22 G04 *J5 5139-480
Heat generating agent for moulding in sheet - 89293C/50
SPCP 09.04.79 SPENCO MED CORP A96 D22 (A18) = GB 2048-292
Treating secretory skin wounds e.g. ulcers - 76738C/43
SPOF 02.08.77 SPOFA SPOJENE FARM NP B02 C02 D13 = GB 1580-998
2-Formyl-quinoxaline-1,4-di:oxide-cyano-acetyl hydrazone derivs. - 14438B/08
SQUI 31.05.79 SQUIBB E R & SONS INC B01 D21 = BE -883-573
Antiinflammatory corticosteroid in the form of a stick - 88686C/50
SQUI 31.05.79 SQUIBB E R & SONS INC B01 D21 *DT 3020-616
Antiinflammatory corticosteroid in the form of a stick - 88686C/50
STAD 22.02.79 STANDARD OIL CO (IND) A97 D13 = US 4235-942
Digestible, water-insol. poly:aminoacid(s) - 68170C/39
STAL 20.01.75 STALEY A E MFG CO A11 B07 C03 D13 (D21) = CH -620-346
Starch contg thickening compsn - 30082X/16
STAL 24.07.78 STALEY A E MFG CO D13 *US 4235-939
Cocoa powder replacement base mixt. - 90025C/50
STEF/ 26.01.77 STEFFENS B A35 D22 F09 = DS 2703-063
Cellulose and plastics recovery from used sanitary articles - 55317A/31
STEI- 20.02.76 STEIN S ASSOC INC D13 = CA 1089-217
Applying batter to foods on horizontal conveyor - 84458Y/47
STEL- 31.05.79 FA STELZER E D13 *DT 2922-263
Mixing plant for milk mixts. - 88564C/50
STEL- 31.05.79 FA STELZER E D15 J02 *DT 2922-264
Aerator for liquids - 88565C/50
STEL- 31.05.79 FA STELZER E D17 *DT 2922-265
Agitator for sugar crystalliser - 88566C/50
STEM 27.04.79 STEINMULLER L & C GMBH D15 = GB 2048-113
Salt water desalting by reverse osmosis - 79067C/45
STII- 30.06.75 INTR DETERGENT TIMI A97 D25 E16 *RU --65-932
Antistatic compsn. - C/50
STII- 30.06.75 ACAD STIINTE ECON BUCURE A97 D25 E16 *RU --65-932
Antistatic compsn. - C/50

*STOM= 20.04.78 STOMATOLOGY RES A96 D21 *SU -730-353
Metallo-ceramic dental prosthesis material - 89488C/50
*SUAY/ 02.03.79 SUAY BALAGUER E D11 *FR 2450-061
Bakery oven with continuous bucket conveyor carrying dough pieces - 88696C/50
SUDC 28.11.75 SUD-CHEMIE AG B03 D13 E13 = CH -620-473
Xylose prodn. from xylan-contg. materials - 23637Y/14
SUGY 04.06.76 SUGIYAMA SANGYO KAG D13 = J8 0044-586
Biologically-active, raw soybean powder prodn. - 07552A/04
SUMI- 26.02.73 SUMITOMO ALUMINIUM D15 E33 (D22) = DS 2407-922
Basic aluminium salt aq. soln. continuous prodn. - 64947V/37
SUNF- 09.09.76 SUN FOODS KK D13 = J8 0044-589
Pasty seasoning contg. poly:ol sweetener - 34452A/19
*SUNZ 21.05.79 SUNSTAR HAMIGAKI KK B04 D16 *DT 2941-471
Test agent for detection of dental caries bacteria - 88602C/50
SVEN 11.05.79 SVENDSEN L G B05 D16 J04 = WP 8002-559
Tri:peptide derivs. with C-terminal chromophore gp. - 86899C/49
*SYNT= 18.09.78 SYNTH NATURAL PERFU D23 E17 *SU -730-799
2-Methoxy-2,6-di:methyl-7-octanone - 89754C/50
*SZAR/ 29.03.79 SZARAZ J D18 H07 *CS 7902-063
Leather lubricant based on leather wastes - C/50

*TABA- 14.05.77 TABACARIA MINERALA D18 *RU --66-768
Neutralising agent for leather - C/50
TAGU/ 24.02.78 TAGUCHI F B04 C03 D16 = J8 0045-529
Mass culture of virus - 74579B/41
TAIC 15.11.71 TAIYO CHEMICAL IND KK D13 = J4 6056-846
Prepn. of devil tongue - 89355C/50
*TAIC 15.11.71 TAIYO CHEMICAL IND KK D13 *J8 0045-173
Prepn. of devil tongue - 89355C/50
*TAIY- 13.04.79 TAIYO KORYO KK D23 E15 *J5 5139-330
Camphorene derivs. useful in perfume compsns. - 89195C/50
*TAKA- 05.04.79 TAKASHIMA SARASHI K D23 F06 *J5 5137-272
Softening creped cloth - 88874C/50
TAKJ 30.04.75 TAISEI CONSTRUCTION KK D15 = J5 1128-155
Electrolytic oxidn. of waste water to reduce COD - 89368C/50
*TAKJ 30.04.75 TAISEI CONSTRUCTION KK D15 *J8 0045-271
Electrolytic oxidn. of waste water to reduce COD - 89368C/50
TATL 06.06.78 TALRES DEV NA NV A11 B04 C03 D16 (D16) = US 4235-966
Microbiological prodn. of alginate polysaccharide(s) - 09629C/06
TEEP 15.10.74 TEE PAK INC D12 = DS 2546-020
Aluminium-tanned collagen sausage casing - 03780X/02
*TEXC 02.04.79 TEXACO DEV CORP A97 D25 E16 H01 (A25) *US 4235-811
Sulphonic acid derivs. of alkoxylated amine(s) - 89974C/50
*TINN= 02.06.77 TINNED GOODS VEGETB D14 *SU -729-419
Food products freezer with vacuum-chambers - 89435C/50
*TOBA= 05.09.78 TOBACCO RES INST C04 D18 *SU -730-341
Prodn. of smoking tobacco from waste - 89485C/50
TOKE 09.04.79 TOKYO SHIBAURA ELEC LTD D23 E17 = BR 8002-022
Unsatd. aliphatic carboxylic acid ester prepn. - 87383C/49
TOKU 28.12.72 TOKUYAMA SODA KK A97 D15 J01 = J8 0044-650
Waste water treatment - 36494W/22
TOMI- 16.06.76 TOMINAGA SEISAKUSHO D15 J01 = J5 2154-177
Oil-water separator - 89362C/50
*TOMI- 16.06.76 TOMINAGA SEISAKUSHO D15 J01 *J8 0045-243
Oil-water separator - 89362C/50
*TOPP 21.05.79 TOPPAN PRINTING KK D13 *BR 7903-158
Compsn. for maintaining freshness of vegetables and fruit - C/50
TORA 20.04.73 TORAY IND INC D18 E14 = J4 9132-300
Neo:hesperidin di:hydro chalcone deriv. - 89357C/50
*TORA 20.04.73 TORAY IND INC D18 E14 *J8 0045-184
Neo:hesperidin di:hydro chalcone deriv. - 89357C/50
TOSH- 09.04.79 TOSHIBA CORP D23 E17 = BR 8002-022
Unsatd. aliphatic carboxylic acid ester prepn. - 87383C/49
TOSI 30.04.76 TOSHIBA MACH KK D14 = J5 2134-065
Appts. for whipping juice drink contg. protein - 89364C/50
*TOSI 30.04.76 TOSHIBA MACH KK D14 *J8 0045-249
Appts. for whipping juice drink contg. protein - 89364C/50
TOWN 25.05.79 TOWNSEND ENG CO D12 = NL 8002-389
Injecting fluid esp. brine into meat and fish for curing - 69605C/40
TOWN 00.00.80 TOWNSEND ENG CO D12 #GB 2048-049
Machine to inject brine, etc. into meat - 20059B/11
TOXN 10.05.73 TOYO JOZO KK A97 B04 D16 = J8 0044-725
Microbial cell bodies microencapsulation - 28201W/17
TREU- 13.09.71 TREUHANDVEREINIGUN B05 D21 = RU --67-290
Hair treatment compsn - 18244U/13
TUCH- 24.04.79 TUCHENHAGEN O GMBH D16 T05 X25 = SW 8003-010
Monitoring of cleaning equipment in fermenting vat - 64215C/37

UEDA- 30.01.76 UEDA HATSUO SHOTEN D18 = J5 2094-401
Treatment of raw hide for shoe heel core - 89351C/50
*UEDA- 30.01.76 UEDA HATSUO SHOTEN D18 *J8 0045-120
Treatment of raw hide for shoe heel core - 89351C/50

UENO 08.03.78 UENO SEIYAKU OYO KE D12 =DS 2907-204
Preparing ground frozen fish used for fish pastes - 47240B/26
UGIN 14.11.78 UGINE KUH PROD CHIM A41 D15 E17 =FR 2450-235
Treating waste water produced in oxidn. of propylene or acrolein - 38551C/22
UGIN 20.04.79 PROD CHIM UGINE KUHLMANN C03 D13 =DK 8001-649
Animal feedstuffs in block or agglomerate form e.g. salt licks - 77338C/44
UGIN 20.04.79 PROD CHIM UGINE KUHLMANN C03 D13 =SW 8002-901
Animal feedstuffs in block or agglomerate form e.g. salt licks - 77338C/44
UGIN 24.04.79 PROD CHIM UGINE KUHLMANN D25 E33 =NO 8001-181
Semi-continuous prodn. of zeolite type-A - 77063C/44
UGIN 24.04.79 PROD CHIM UGINE KUH D25 E33 =SW 8003-020
Semi-continuous prodn. of zeolite type-A - 77063C/44
UNIC 07.06.73 UNION CARBIDE CORP D15 E17 =DS 2427-088
Waters contg. unsatd carbonyl cpds. decontaminated - 89131V/52
UNIC 04.05.76 UNION CARBIDE CORP D12 =GB 1580-971
Placing sizing disc in end of shirred casing - 44956Y/25
UNIC 18.04.79 UNION CARBIDE CORP D15 =DK 8001-638
Aeration of liquid-solid mixture - 79266C/45
UNIL 06.03.70 UNILEVER NV D23 E17 =DS 2110-213
Fatty acid diglyceride prepn - 58674S/36
UNIL 16.06.70 UNILEVER NV A32 D12 (A11) =J8 0045-179
Coating food esp sausages - with methyl cellulose by extrusion - 81298S/51
UNIL 13.03.74 UNILEVER NV A96 D21 =CH -620-118
Anti-perspirant for human skin - 64252W/39
UNIL 10.03.75 UNILEVER NV C03 D23 E17 (D13) =DS 2609-705
De-waxing triglyceride oils - 74334X/40
UNIL 07.11.75 UNILEVER NV D13 =CH -620-342
Low fat, margarine type emulsion compsn. - 32796Y/19
UNIL 07.11.75 UNILEVER NV D13 =CH -620-343
Low fat, margarine type emulsion compsn. - 32795Y/19
UNIL 13.11.75 UNILEVER NV D23 (D13) =DS 2651-761
Refining glyceride oils, esp. for use in salad oils or margarine - 36723Y/21
UNIL 02.07.76 UNILEVER NV D23 S03 =GB 1581-333
Perfume compsn. with colour indicator - 07744A/04
UNIL 22.12.77 UNILEVER NV A97 D25 E19 =US 4235-758
Stable liq. detergents with low hydrotrope content - 49430B/27
UNIL 14.02.78 LEVER BROTHERS CO A97 D25 =US 4235-752
Detergent and esp. dishwashing compsn. - 61747B/34
UNIL 06.04.79 UNILEVER NV D25 E11 =BR 8001-956
Bleaching compsns. contg. peroxy cpd. and activator - 75321C/43
UNIL 06.04.79 UNILEVER NV D25 E11 =J5 5137-199
Bleaching compsns. contg. peroxy cpd. and activator - 75321C/43
*UNIL 12.04.79 UNILEVER NV D24 *BR 8002-198
Dimensionally-stable detergent bars and their prepn. - C/50
UNIL 20.04.79 UNILEVER NV A97 D25 =NO 8001-130
Efficient bleach prod. for use in washing machines - 83010C/47
UNIL 21.05.79 UNILEVER NV A87 D25 E19 F06 =DT 3019-076
Conc., aq. liq. fabric softeners - 86374C/49
UNIL 21.05.79 UNILEVER NV A87 D25 E19 F06 =NL 8002-926
Conc., aq. liq. fabric softeners - 86374C/49
UPJO 17.04.74 UPJOHN CO B03 D16 =CH -620-243
Antibiotic U-43795 and its derivs - 74374W/45
*URAL= 17.07.78 URALS HEAT TECHN D15 J01 *SU -730-633
Thermal deaerator for electric power station etc. boiler feed water - 89609C/50
URAS- 09.09.77 URASHIMA NORIKK D13 =J8 0044-588
Natural flaky seasoning - 37888B/20
*USNA 15.01.79 US SEC OF NAVY D15 *US 4235-679
Solar still with circulating working fluid - 89908C/50
*USSH 29.03.76 US SEC OF HEALTH D15 *US 4235-677
High purity water distn. appts. for biomedical use - 89906C/50
UYBE- 03.05.79 BEN-GURION UNIV D13 #GB 2048-047
Powder compsns. for prodn. of acidulated milk prods. - 82813C/47
UYFL- 21.06.78 UNIV FLORIDA BOARD REGEN D22 L01 M13 =US 4234-972
Metal-coated biologically active glass - 78321A/44
UYST- 22.06.76 UNIV STRATHCLYDE B04 D16 S03 S05 =CA 1089-339
Staining microorganisms for microscopic counting - 04614A/03

*VAGU/ 06.06.79 VAGUNDA J D14 *CS 7903-877
Cooling unit for water recirculation on tinned food sterilisation - C/50
VAPO- 19.04.79 VAPORTEK INC D15 =GB 2048-233
Deodorising vapour dispensing unit for pond surface - 56771C/32
*VDON/ 10.09.80 VAN DONGEN C A D21 *NL 8005-095
Making partial model for prosthetic dental work - 89419C/50
*VERI- 01.07.75 STAT VERIF INTRETIN D21 *RU --67-557
Dental implant - C/50
*VERI- 16.08.75 STAT VERIF INTRETIN B04 D16 J04 *RU --67-561
Rapid blood cholinesterase detector - C/50
*VETE= 11.04.79 VETERINARY EXPER B04 C03 D16 *DT 2914-813
Live vaccine against theileriosis in cattle - 88444C/50
*VICS 25.05.79 VICKERS LTD D22 S05 T06 *DT 3019-661
Enclosure for treatment of patients - 88661C/50
*VOTR/ 10.05.79 VOTRUBA V D15 *CS 7903-190
Exchangeable magnet frame for water treatment appts. - C/50

*WART- 01.05.79 ANSTALT WARTEGG D12 *GB 2048-046
Preparing hamburgers for distribution and storage - 88754C/50
WATE- 26.12.73 WATER POLLUTION CON D15 J01 =DS 2461-663
Fine sieving drum for solid matter suspended in water - 48078W/29
WATE- 16.02.79 WATER REFINING D15 =US 4235-715
Removing hardness and alkalinity from water - 64631C/37
*WEBE- 30.05.79 WEBECKE & CO D22 *DT 2921-915
Sterilisation of sensitive porous articles - 88548C/50
WEBE/ 16.01.79 WEBER W D15 =NL 8020-006
Biological purificn. of waste water in open tank - 41509C/24
WEDA- 11.04.79 WEDA-DAMMANN WESTER C03 D13 =GB 2048-095
Pumpable cattle fodder preparation - 77211C/44
WELL 20.08.70 WELLCOME FOUNDATION LTD B04 C03 D16 =J8 0045-192
Vaccine against foot-rot in sheep - 14489T/09
WELL 28.03.80 WELLCOME FOUNDATION LTD B04 C03 D16 =GB 2048-068
Trypanosoma cruzi antigen glyco:protein - 77293C/44
*WIEN/ 30.05.79 WIENEKE F D13 *DT 2921-936
Swelling and softening biological prods. e.g. potatoes - 88550C/50
WILK/ 01.02.77 WILKE G D11 =GB 1581-092
(Flaky) pastry prodn. without a baking stage - 57016A/32
WILL/ 30.07.76 WILLISCH H C04 D16 (D15) =GB 1580-944
Composting comminuted refuse opt. mixed with sludge - 10574A/06
WILL/ 22.02.77 WILLEMSEN W H D13 =GB 1581-318
Mixer extruder unit for shaped pieces of dough - 45906A/26
WINT- 15.09.77 WINTERHALTER K KG D14 =GB 1581-316
Washing machine to clean vegetables with circulated water - 40419A/23
WOLF 03.01.79 WOLFF WALSRODE AG A11 D15 L02 (A12 A14 A97) =J5 5139-401
Water-soluble prods. used as building material additive - 50029C/29
WURT- 09.04.79 WURTTEMBERGISCHE PA D21 E24 #J5 5139-318
Dentifrice powder or paste contg. dye and surfactant - 33519B/18

YANA- 23.12.76 YANAGIYA HONTEN D21 E36 =J8 0045-527
Aq. paste contg. hydrogen peroxide, used for dyeing or bleaching hair - 59440A/33
YEDA 22.10.74 YEDA RES & DEV CO LTD B01 C03 D13 =CH -620-453
1-Alpha-hydroxy-provitamin D3 prepn - 16885X/10
YEDA 22.04.79 YEDA RES & DEV CO LTD B04 D16 =GB 2048-472
Interferon quantitative determn. in a medium - 79158C/45
YEDA 22.04.79 YEDA RES & DEV CO LTD B04 D16 =SW 8002-595
Interferon quantitative determn. in a medium - 79158C/45

ZENM- 28.04.79 ZENMI CO LTD A96 D22 =GB 2048-078
Disposable sanitary napkin - 81183C/46
ZETA- 21.05.79 ZETA-ESPACIAL SA D13 =NL 8002-672
Mfr. of gasified sweets from a sugar syrup - 64232C/37

R

0-R DE
1921-911 R09
3658-455 T20
1921-911 C50

7-R BD
7008-361 R50
2050-080 S25
1257-156 S49
3687-810 T37
-529-836 U04
-151-437 X51
0044-597 C50

S

3-S AD
-758-152 S17
2054-293 S21
2067-570 S46
1273-089 T18
3717-149 U10
-942-453 V10
2054-293 C50

4-S DE
-763-889 S36
7103-013 S38
6002-317 S42
2110-213 S44
2084-267 T10
7101-370 T52
--920-139 U07
1325-924 U32
--554-412 V44
2110-213 C50

8-S AD
--768-606 S51
2129-171 T01
7108-232 T02
7001-324 T05
2097-896 T22
---89-050 T27
288-111 T36
3767-821 U45
954-372 V39
-443-504 W33
0045-179 C50

T

--T D
7771-409 T09
1141-329 T11
0005-262 T13
107-056 T31
2293-477 T42
118-062 T46
7718-484 U11
961-692 W07
045-170 C50

T BCD
771-536 T09
141-901 T10
111-422 T10
005-047 T12
103-402 T28
105-544 U17
843-451 V44
67-168 B21
41-901 C08
045-527 C28
045-192 C50

T CDEJ
01-284 T34
46-567 V46
00-451 W44
79-338 W52
61-486 X06
76-277 X29
00-685 T34
16-373 T37
23-477 T52
98-618 U41
46-152 V06
02-899 V13
24-981 B38
64-759 C50

58258-T ABD
DT 2207-635 T37
J4 7020-328 T43
FR 2126-270 U03
US 3755-558 U37
GB 1351-409 V18
CA -950-828 V30
J8 0044-727 C50

76952-T CD
J4 7025-380 T48
J8 0045-182 C50

U

04396-U ADE
NL 7208-770 U04
DT 2133-820 U06
FR 2144-838 U17
ZA 7204-659 U21
DL --99-571 U43
GB 1360-897 V30
US 3859-351 W03
OE 7205-802 W15
DS 2133-820 Y38
RU --68-812 C50

06745-U D
DL --93-980 U06
DT 2220-648 U28
DL --93-980 W19
DS 2220-648 C50

18244-U BD
BE -788-788 U13+
NL 7212-424 U14
DT 2244-830 U19
FR 2152-935 U26
J4 8096-735 V08+
DL -102-914 V13+
ZA 7206-247 V25
GB 1408-036 W40+
OE 7207-667 X03
CA -986-413 X16+
CH -581-467 X52+
RU --67-290 C50+

23071-U ABCD
DT 2247-021 U17+
NL 7213-482 U17
BE -789-758 U18
ZA 7206-255 U27
FR 2157-831 U34
J4 8061-611 U45
SF 7402-189 V49+
DL -105-722 V32
OE 7208-385 W15
US 3886-267 W23
GB 1411-267 W43+
GB 1411-266 W43+
US 3928-581 X01+
US 3965-133 X27+
CA -991-544 X28+
US 3969-395 X30+
OE 7404-959 X40
CH -580-123 X42+
CS 7206-735 Y10+
CH -590-891 Y36+
US 4056-672 Y45+
DT 2265-386 A03+
DK 7704-192 A04+
DS 2247-021 A51+
NL 7901-163 B28+
NL -162-943 C10+
NL -164-303 C32+
SU -730-276 C50+

54018-U CD
BE -795-992 U37
DT 2309-507 U38
NL 7302-803 U38
US 3775-088 U49
FR 2174-160 U51
J4 8096-361 V08
CA -974-376 W40
GB 1416-081 W49
RU --65-172 C50+

60365-U DEH
DT 2212-929 U41
BE -796-904 U41
NL 7302-069 U41
FR 2176-791 V01
J4 9012-091 V14
US 3843-465 V44
GB 1418-511 W52
IL --41-357 X09
DS 2212-929 Y35
J8 0044-596 C50

64297-U DE
DT 2317-585 U43+
J4 8102-042 V26
US 3909-405 W41+
GB 1419-559 X01+
CH -568-937 X02+
J8 0045-635 C50

V

20484-V BCD
NL 7311-757 V11+
BE -804-251 V11+
DT 2343-827 V18+
FR 2197-575 V22+
US 3813-391 V23
ZA 7305-893 V35
GB 1406-204 W38+
HU T011-771 X29
US 3814-755 V24
IL --43-361 Y20+
CA 1013-344 Y29
SF 7902-534 C04+
DK 8002-916 C50+

20505-V BCD
NL 7312-062 V11+
BE -804-350 V11+
DT 2344-095 V17+
US 3823-141 V29
US 3813-376 V23
US 3813-390 V23
ZA 7305-908 V40
GB 1412-721 W45+
FR 2279-408 X20+
CA 1014-951 Y33
CA 1014-950 Y33
IL --43-410 A06+
SF 7902-635 C04+
DK 8002-915 C50+

23145-V D
DT 2243-281 V13
DS 2243-281 C50

38352-V D
BE -809-749 V21
DT 2400-878 V30
NL 7400-444 V31
FR 2213-977 V45
PT --61-112 W04
ZA 7309-579 W35
GB 1454-862 X45
CA 1015-633 Y35
CH -620-241 C50

62419-V AD
NL 7401-903 V35
BE -810-967 V36
DT 2405-192 V36
FR 2217-274 V49
ZA 7400-949 W10
PT --61-347 W12
J5 0035-065 W22
AR -201-367 W42
GB 1414-918 W47
IL --44-110 X45
CA 1019-476 Y44
US 4126-549 A48
J7 9029-998 B43
SU -730-293 C50

63453-V DE
DT 2406-965 V36
FR 2218-319 V50
J4 9108-008 W06
GB 1410-751 W43
US 3962-121 X25
J7 9041-566 C02
DS 2406-965 C50

64947-V DE
DT 2407-922 V37+
FR 2219-116 V51+
J4 9111-893 W17
J4 9111-894 W17
US 3957-947 X22+
GB 1462-943 Y04+
J7 8018-997 A28
J7 8018-998 A28
DS 2407-922 C50+

66558-V DH
DT 2408-383 V38
FR 2219-224 V51
US 3891-503 W27
J4 9109-576 C50

70247-V DE
J4 9061-114 V40
J8 0044-797 C50

89131-V DE
DT 2427-088 V52
US B367-739 W06
FR 2232-516 W12
J5 0021-566 W18
US 3923-648 W51
GB 1419-610 X01
CA 1029-137 A16
DS 2427-088 C50

W

00919-W BCDJ
NL 7407-788 W01
DT 2426-389 W05
FR 2233-095 W13
J5 0035-072 W22
US 3971-852 X32
GB 1464-616 Y07
IT 1019-651 A11
CA 1049-335 B11
CH -620-135 C50

14727-W DE
DT 2437-890 W09+
NL 7408-383 W09+
US 3872-111 W13
US 3873-731 W14
J5 0042-073 W24+
FR 2250-754 W35+
GB 1441-491 X27+
DT 2462-673 A09+
CH -602-022 A33+
SU -583-133 A43
CA 1045-891 B05
CA 1048-516 B09
CH -611-288 B23+
CA 1056-837 B27
SU -648-100 B45+
CH -614-949 C02+
DS 2437-890 C50+

22825-W BCD
DT 2444-070 W14
BE -820-206 W15
NL 7412-482 W15
SW 7411-296 W20
NO 7403-395 W21
DK 7404-474 W25
FR 2244-498 W26
SF 7402-669 W28
J5 0058-071 W29
PT --62-631 W33
DL -114-814 W40
US 3976-778 X36+
OE 7407-621 X50
HU T013-932 Y41
CH -592-653 Y48
SU -542-473 Y51
US 4066-778 A03
SU -564-812 A22
SU -571-191 A28
CH -603-633 A37+
CH -603-632 A37+
IL --45-536 A47
OE 7604-567 A48
OE 7604-568 A48
CS 7406-554 B34
CS 7704-703 B34
CS 7704-704 B34
RU --64-925 C50

23962-W DEM
US 3873-465 W14
DT 2453-107 X21+
J5 1054-081 X26
GB 1442-056 X28+
CA 1011-098 Y24
J7 8002-628 A08+
DS 2453-107 C50+

28201-W ABD
J5 0004-232 W17
J8 0044-725 C50

32456-W AD
BE -821-708 W20
NL 7412-021 W20
DT 2354-432 W21
J5 0074-600 W33
FR 2249-835 W34
GB 1436-077 X21
US 3962-132 X25
DS 2354-432 X30
OE 7408-772 Y09
IT 1021-985 A21
CA 1037-015 A36
OE 7608-690 B31
J8 0045-487 C50

36494-W ADJ
J4 9089-691 W22
J8 0044-650 C50

44101-W AD
US 3889-678 W26
BE -827-850 W44
PT --63-633 X27+
OE 7502-572 X36+
DT 2516-380 X44+
NL 7504-587 X45+
SW 7503-888 X47+
J5 1119-825 X49+
ZA 7502-071 Y01+
BR 7504-012 Y07+
FR 2308-643 Y08+
DL -124-711 Y23
GB 1501-239 A07
HU T014-947 A23
IT 1026-310 A49
OE 7502-960 B13
CA 1064-635 B44
RU --66-241 C50

45158-W BD
J5 0019-992 W27
J8 0045-194 C50

48078-W DJ
DT 2461-663 W29
FR 2255-936 W42
GB 1497-866 A02
CA 1060-351 B35
DS 2461-663 C50

57811-W BD
J5 0042-093 W35
J8 0045-197 C50

57818-W DE
J5 0046-887 W35
J8 0045-191 C50

64252-W AD
DT 2510-364 W39
BE -826-560 W39
NL 7502-843 W40
SW 7502-785 W45
NO 7500-848 W46
J5 0126-820 W49
DK 7501-014 W49
SF 7500-704 W51
FR 2263-742 X01
ZA 7501-473 X48
GB 1501-862 A08
OE 7501-896 A31
IT 1032-583 B40
CH -620-118 C50

67721-W BD
DT 2513-855 W41
BE -827-331 W42
NL 7503-669 W42
NO 7501-074 W48
J5 0135-294 W52
SW 7503-535 W52
DK 7501-329 X02
FR 2265-398 X03
SF 7500-957 X04
ZA 7501-933 X21
GB 1467-413 Y11
J5 2083-994 Y35+
OE 7502-282 A06
IL --46-894 A33
SU -576-965 A36
CA 1049-532 B11
US 4172-129 B44
US 4181-716 C03
US 4203-973 C22
US 4235-882 C50

72840-W BCD
DT 2517-316 W44+
CA 1074-325 C16+
CA 1076-120 C19+
NL -163-824 C23+
NO 8001-852 C38+
DK 8002-869 C50+

74374-W BD
DT 2514-984 W45
BE -828-040 W45
NL 7504-508 W45
SW 7504-413 W50
J5 0145-589 X02
FR 2267-779 X06
US 3944-562 X13
ZA 7501-855 X17
GB 1458-340 X51
CA 1034-524 A30
CH -620-243 C50

76243-W ABD
J5 0005-284 W46
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85774-X DE
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SW 7607-090 Y11+
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DK 7602-910 Y14+
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12599-A BC
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73179-A D
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75344-A D
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14438-B BCD
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20059-B D
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21821-B AD
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24008-B D
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28590-B D
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29676-B AD
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ZA 7901-540 C35+
DT 2906-213 C37+
GB 2041-963 C38+
J5 5116-797 C43+
DK 7901-306 C47+
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SW 7902-904 C47+
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35651-B BD
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42574-B D
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NL 7902-076 B42+
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59837-C ADFJ
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SW 8002-847 C49
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62324-C ADG
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69594-C AD
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69605-C D
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NL 8002-389 C50

71816-C DJ
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NL 8001-792 C42
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71912-C D
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72784-C DE
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GB 2048-253 C50+

75321-C DE
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77063-C DE
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GB 2048-095 C50

77214-C BDJ
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77293-C BCD
DT 3012-204 C44
GB 2048-068 C50+

77304-C D
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GB 2046-074 C46
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77338-C CD
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79067-C D
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SW 7907-262 C49
DK 7903-486 C50

80122-C BD
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PT --71-091 C47+
SW 8002-827 C49+
GB 2047-700 C49+
J5 5139-380 C50
DK 8001-618 C50+

80648-C D
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80976-C CD
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81117-C CD
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NL 8001-965 C46
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81122-C BD
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GB 2048-245 C50+

81183-C AD
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GB 2048-078 C50

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83010-C AD
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GB 2048-302 C50+

83071-C D
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GB 2048-300 C50

83178-C D
GB 1579-297 C47
CH -620-098 C50

84576-C D
DT 2918-829 C48
NL 7903-989 C50+

84727-C D
DT 3015-088 C48
GB 2048-051 C50

85628-C BDE
NL 8002-603 C48+
GB 2048-266 C50+

86374-C ADEF
BE -883-414 C49
NL 8002-926 C50
DT 3019-076 C50

86678-C D
DT 3019-890 C49
NL 8002-967 C50

86750-C ACDF
EP --19-215 C49
DT 2920-525 C50

86751-C ACDE
EP --19-216 C49
DT 2920-526 C50

86899-C BDJ
EP --19-589 C49+
WP 8002-559 C50+

87383-C DE
J5 5136-247 C49
BR 8002-022 C50

87640-C D
NL 8001-712 C49
US 4235-723 C50

88368-C BD
BE -883-564 C50

88370-C D
BE -883-574 C50

88372-C BCD
BE -883-587 C50

88373-C D
BE -884-085 C50

88378-C D
BE -884-522 C50+

88384-C D
BE -884-565 C50

88385-C CD
BE -884-573 C50+

88386-C BD
BE -884-577 C50

88392-C BCD
BE -884-610 C50+

88395-C D
BE -884-630 C50

88403-C ADEG
BE -884-652 C50

88415-C D
BE -884-693 C50

88421-C DE
CH -620-099 C50

88422-C DJ
CH -620-133 C50

88437-C DM
DS 2923-726 C50

88441-C D
DS 3014-936 C50

88444-C BCD
DT 2914-813 C50

88454-C AD
DT 2920-204 C50

88463-C D
DT 2920-476 C50+

88478-C D
DT 2920-737 C50

88489-C ACDE
DT 2920-914 C50

88500-C DE
DT 2921-139 C50

88504-C ADE
DT 2921-163 C50

88508-C DM
DT 2921-192 C50

88514-C D
DT 2921-236 C50
NL 8003-019 C50

88524-C BCD
DT 2921-401 C50

88533-C DE
DT 2921-619 C50

88536-C D
DT 2921-682 C50

88538-C D
DT 2921-709 C50

88546-C DJ
DT 2921-871 C50

88548-C D
DT 2921-915 C50

88549-C D
DT 2921-918 C50

88550-C D
DT 2921-936 C50

88558-C ABDE
DT 2922-118 C50

88564-C D
DT 2922-263 C50

88565-C DJ
DT 2922-264 C50

88566-C D
DT 2922-265 C50

88568-C D
DT 2922-348 C50

88578-C DE
DT 2922-482 C50

88581-C BD
DT 2922-496 C50

88588-C D
DT 2922-524 C50

88598-C AD
DT 2922-671 C50

88602-C BD
DT 2941-471 C50

88609-C D
DT 3008-503 C50
NL 7904-048 C50

88643-C D
DT 3019-254 C50

88661-C D
DT 3019-661 C50

88671-C AD
DT 3020-075 C50

88682-C BCD
DT 3020-470 C50

88686-C BD
DT 3020-616 C50
BE -883-573 C50

88692-C D
FR 2450-045 C50

88694-C D
FR 2450-053 C50

88695-C CDEF
FR 2450-059 C50+

88696-C D
FR 2450-061 C50+

88697-C D
FR 2450-062 C50

88698-C D
FR 2450-065 C50

88699-C D
FR 2450-067 C50

88701-C BDE
FR 2450-100 C50

88704-C ABD
FR 2450-112 C50+

88715-C DE
FR 2450-236 C50

88716-C D
FR 2450-237 C50

88726-C D
FR 2450-420 C50

88729-C D
FR 2450-448 C50

88746-C D
GB 1581-328 C50

88747-C DE
GB 1581-329 C50

88748-C D
GB 1581-339 C50

88752-C BCD
GB 1581-428 C50

88753-C AD
GB 2048-037 C50

88754-C D
GB 2048-046 C50

88755-C D
GB 2048-048 C50

88776-C ADE
GB 2048-229 C50+

88781-C DE
GB 2048-251 C50+

88788-C AD
GB 2048-296 C50+

88809-C AD
J5 5108-358 C50
J5 5108-358 C40

88811-C D
J5 5109-496 C50
J5 5109-496 C40

88819-C ACDF
J5 5117-611 C50

88833-C ADEG
J5 5137-175 C50

88840-C DE
J5 5137-185 C50

88841-C CD
J5 5137-186 C50

88845-C ADG
J5 5137-201 C50

88849-C ADF
J5 5137-210 C50

88851-C ADFJ
J5 5137-212 C50

88874-C DF
J5 5137-272 C50

89046-C D
J5 5138-352 C50

89047-C D
J5 5138-368 C50

89048-C D
J5 5138-371 C50

89049-C DJ
J5 5138-385 C50

89050-C D
J5 5138-388 C50

89051-C DE
J5 5138-389 C50

89053-C BD
J5 5138-394 C50

89054-C BD
J5 5138-395 C50

89055-C D
J5 5138-398 C50

89056-C DE
J5 5138-399 C50

89072-C DG
J5 5138-743 C50

89181-C DE
J5 5139-311 C50

89182-C AD
J5 5139-312 C50

89184-C D
J5 5139-314 C50

89185-C D
J5 5139-315 C50

89186-C ADG
J5 5139-316 C50

89187-C AD
J5 5139-317 C50

89195-C DE
J5 5139-330 C50

89202-C DE
J5 5139-340 C50

89238-C BD
J5 5139-396 C50

89293-C ADG
J5 5139-480 C50

89299-C ADEH
J5 5139-494 C50

89300-C ADEH
J5 5139-495 C50

89301-C DE
J5 5139-500 C50

89326-C D
J8 0044-590 C50
J5 1112-597 C50

89331-C D
J8 0044-651 C50
J5 4140-269 C50

89332-C D
J8 0044-652 C50
J5 3097-673 C50

89334-C DJM
J8 0044-677 C50

89341-C DE
J8 0044-799 C50
J5 1104-001 C50

89347-C DF
J8 0044-90?
J5 0150-49?

89351-C D
J8 0045-120
J5 2094-401

89352-C D
J8 0045-166
J4 9110-861

89353-C D
J8 0045-168
J4 8075-759

89354-C DE
J8 0045-171
J5 0025-749

89355-C D
J8 0045-173
J4 6056-846

89356-C D
J8 0045-176
J4 8040-949

89357-C DE
J8 0045-184
J4 9132-300

89358-C BD
J8 0045-196

89359-C DE
J8 0045-202
J4 9028-458

89360-C DE
J8 0045-203
J4 9057-958

89361-C ADJ
J8 0045-242
J5 2045-768

89362-C DJ
J8 0045-243
J5 2154-177

89364-C D
J8 0045-249
J5 2134-065

89368-C D
J8 0045-271
J5 1128-155

89369-C D
J8 0045-276
J5 3016-455

89370-C D
J8 0045-277
J5 0134-974

89388-C DE
J8 0045-524
J4 9018-640

89415-C D
NL 8004-385

89417-C D
NL 8004-765

89419-C D
NL 8005-095

89434-C D
SU -729-416

89435-C D
SU -729-419

89453-C DJ
SU -729-473

89479-C D
SU -730-334

89480-C D
SU -730-335

1-C D
-730-336 C50

2-C D
-730-337 C50

3-C BD
-730-338 C50

4-C D
-730-339 C50

5-C CD
-730-341 C50

8-C AD
-730-353 C50

09-C DJ
-730-633 C50

45-C DE
-730-674 C50

49-C DE
-730-678 C50

61-C ABD
-730-690 C50

63-C ABDJ
-730-692 C50

83-C D
-730-798 C50

84-C DE
-730-799 C50

85-C AD
-730-800 C50

87-C D
-731-202 C50

95-C DF
4235-177 C50

00-C AD
4235-228 C50

05-C D
4235-237 C50

07-C ABD
4235-244 C50

11-C DE
4235-247 C50+

D-C D
235-251 C50

--C D
235-578 C50

--C DEF
235-599 C50

--C DM
235-631 C50+

--C D
235-677 C50+

--C D
235-678 C50

-C D
235-679 C50

C D
235-680 C50+

C DJ
235-698 C50
905-725 C22

C AD
35-712 C50

C ADEJ
35-717 C50

89928-C D
US 4235-719 C50

89929-C D
US 4235-720 C50

89932-C BDE
US 4235-729 C50+

89934-C ADEH
US 4235-734 C50

89935-C AD
US 4235-735 C50

89941-C D
US 4235-750 C50

89954-C BD
US 4235-772 C50

89963-C D
US 4235-795 C50

89964-C D
US 4235-796 C50

89973-C CDEM
US 4235-809 C50

89974-C ADEH
US 4235-811 C50

89989-C D
US 4235-842 C50

89993-C D
US 4235-849 C50

90000-C BDK
US 4235-864 C50+

90003-C DE
US 4235-873 C50

90004-C DE
US 4235-874 C50

90005-C BD
US 4235-877 C50+

90020-C CD
US 4235-933 C50

90021-C D
US 4235-934 C50+

90022-C D
US 4235-935 C50

90023-C D
US 4235-936 C50+

90024-C DE
US 4235-938 C50+

90025-C D
US 4235-939 C50

90026-C D
US 4235-940 C50

90034-C BDJ
US 4235-960 C50

90035-C BDJ
US 4235-962 C50

90036-C D
US 4235-963 C50

90037-C D
US 4235-964 C50+

90038-C BCD
US 4235-967 C50+

90040-C D
US 4235-971 C50+

90051-C BD
US 4235-994 C50+

90091-C BD
WP 8002-296 C50

90094-C AD
WP 8002-369 C50

90097-C BD
WP 8002-501 C50+

90100-C BCD
WP 8002-504 C50

90113-C D
WP 8002-556 C50

90114-C CD
WP 8002-557 C50+

90129-C BD
WP 8002-596 C50

90130-C D
WP 8002-597 C50

BE -883
* 564 88368C B04D16
= 573 88686C B01D21 + P3
* 574 88370C D15
* 587 88372C B02C02D16

BE -884
* 085 88373C D13P7
* 522 88378C D15
* 565 88384C D13Q7
* 573 88385C C03D13
* 577 88386C B04D21S05
* 610 88392C B04C03D13
* 630 88395C D14
* 652 88403C A60D15E11G02
* 693 88415C D13

BR 7903
* 158 C D13
* 250 C D15J01

BR 7905
= 725 89916C D15J03X25 + P4

BR 8001
= 951 75587C D16E13
= 956 75321C D25E11
* 961 C D18J01P1

BR 8002
= 011 77480C B04D16J04S03R1
= 022 87383C D23E17 + P3
= 025 77546C A97C03D16
= 026 77438C D15H07J01
* 031 C D15E33L02
= 154 79202C A97D18G03P1
= 165 77304C D13
* 198 C D24

CA 1089
= 158 27217Y D25E13F06
= 160 07461Y D18Q3
= 210 55674B A97D18E19P1
= 217 84458Y D13P4
= 220 24008B D17Q7
= 283 08200A D13
284 21212A C03D13P1
= 285 90052Y C03D13
= 286 61931A D13
= 287 47396B D15 + P7
= 315 44129A A97D15E11M14
= 322 41292C D15Q5 + Q4
= 339 04614A B04D16S03S05 + R1
= 359 11160Y B04D16S03S05P3R1
= 367 70786A D21E19P2
= 368 37077B A96D21E33
= 374 25715A D15
= 381 47091A D16
= 382 32390A D16E31M25
= 383 38479A B02D16
= 384 10283A D16
= 402 49536A D15
= 465 25131Y D25E12G02
= 486 90454Y D25E19J04
= 493 69038X B05C03D22E16 + P3
= 573 69164A D15
577 36066Y A14D25E12

CH -620
= 096 05914Y D22E17P3
= 098 83178C D13
* 099 88421C D23E15
= 115 27146Y A96D21
= 116 20394Y A96C03D22E16P3
= 117 03257Y B05D21E14
= 118 64252W A96D21
= 119 68932X D23E14
= 120 82089A A96D23
* 133 88422C D18J01
= 135 00919W B07C03D21J04 + P7
= 175 31842X A97D25E37
= 179 61942X D15E11F06
= 233 09707Y A41D21E13
= 241 38352V D25
= 242 81535W D16
= 243 74374W B03D16
= 337 23885Y C03D22E19H08P3
= 342 32796Y D13
= 343 32795Y D13
= 344 82949Y B02D13
= 345 40305Y C03D13
= 346 30082X A11B07C03D13
= 347 65264A D13
= 358 09300Y B05C01D15E11
= 359 09301Y B05C01D25E11
= 360 44092X B05D21E11
= 361 88086A D23E17
= 409 87189X C04D16
= 430 84730Y B02D21E13
= 432 28688X C03D13E13
= 435 38269X D23E13
= 453 16885X B01C03D13

CH -620
= 471 05072Y B04C03D16
= 472 94294X B04D16J04S03R1
= 473 23637Y B03D13E13
= 474 21622Y D21M26 + P2

CS 7901
* 262 C C03D13
* 276 C D13
* 564 C C03D13

CS 7902
* 063 C D18H07

CS 7903
* 088 C C03D13
* 188 C D12
* 190 C D15
* 194 C D13
* 351 C D16
* 434 C D15E36
* 663 C C03D13
* 696 C D14P1
* 877 C D14Q7

CS 7904
* 785 C D16
* 786 C D16

CS 7905
* 221 C B05D16E16

CS 7906
* 846 C D15J01

CS 7907
* 103 C D15

DK 7901
631 79172C D16

DK 7903
= 486 80119C C03D13

DK 8001
= 618 80122C B02D16
= 638 79266C D15
= 639 77067C B04D16
= 646 62215C B05D16
= 649 77338C C03D13
= 652 79267C B02C02D13E13
= 660 80976C C03D13
= 661 79256C C03D13

DK 8002
869 72840W B02C02D16
= 915 20505V B02C02D13
= 916 20484V B02C02D13

DS 1921
= 911 14010R D21E19E24

DS 2054
= 293 30213S A16D22 + P3

DS 2110
= 213 58674S D23E17

DS 2220
= 648 06745U D16

DS 2243
= 281 23145V D21

DS 2406
= 965 63453V D25E19

DS 2407
= 922 64947V D15E33

DS 2427
= 088 89131V D15E17P3

DS 2437
= 890 14727W D13E13

DS 2453
107 23962W D15E11M14

DS 2461
= 663 48078W D15J01 + P4

DS 2544
= 117 28692X A88D15J01

DS 2546
= 020 03780X D12

DS 2550
= 496 14432Y D17P4

DS 2552
= 311 30222X D23

DS 2609
= 705 74334X C03D23E17

DS 2616
= 939 76135Y A11D21

DS 2628
= 641 04270Y D21E24

DS 2651
= 761 36723Y D23

DS 2703
= 063 55317A A35D22F09 + P4

DS 2730
= 883 04332B D15E36

DS 2734
= 660 12599A B04C03D16

DS 2743
= 444 27221A B04D16J04S03R1

DS 2801
= 211 55363A A97D18F04P1

DS 2823
= 469 00263B B05D16

DS 2907
= 204 47240B D12

DS 2923
* 726 88437C D15M24

DS 3014
* 936 88441C D12

DT 2560
= 263 17249X D21E17

DT 2914
* 813 88444C B04C03D16

DT 2916
= 284 86413B A32D14F09L02

DT 2920
* 204 88454C A35D21S05P3
* 476 88463C D22P3
= 525 86750C A11C04D16F09
= 526 86751C A41C04D15E14
592 66229B B02C03D16E13
* 737 88478C D15Q3
* 914 88489C A97C04D15E36

DT 2921
* 139 88500C D23E14
* 163 88504C A96D22E13P3
* 192 88508C D21M22P5
* 236 88514C D14Q3
* 401 88524C B04C03D16
* 619 88533C D23E15
* 682 88536C D11P4
* 709 88538C D16
* 871 88546C D17J01
* 915 88548C D22P3
* 918 88549C D16
* 936 88550C D13

DT 2922
* 118 88558C A96B04D16E12
* 263 88564C D13
* 264 88565C D15J02
* 265 88566C D17
# 275 82412B D15E36J03
* 348 88568C D15X25
= 365 77358C D21
* 482 88578C D18E21
* 496 88581C B04D16
* 524 88588C D21
* 671 88598C A97D21

DT 2941
* 471 88602C B04D16

DT 3008
* 503 88609C D13

DT 3016
= 517 67780C D17

DT 3019
= 076 86374C A87D25E19F06
* 254 88643C D16
* 661 88661C D22S05T06P3R2

DT 3020
* 075 88671C A97D13
* 470 88682C B02C02D13
* 616 88686C B01D21 + P3

FR 2450
* 045 88692C D18X25P1
* 053 88694C D13P1
* 059 88695C C03D22E19F09P6
* 061 88696C D11
* 062 88697C D11
= 063 72187B D12 + Q3
= 064 71912C D13
* 065 88698C D13
= 066 66418C D23E14
* 067 88699C D13
= 070 64393C A96D22P2
* 100 88701C B05D21E24P3
= 105 64466C A96D21
107 29676B A96D21
= 108 65356C B04D16
* 112 88704C A96B04D16
= 235 38551C A41D15E17
* 236 88715C D15E35
* 237 88716C D15
= 238 49869C D15
= 262 91414B D16
265 59837C A11D15F06J01
= 277 64462C C04D15E17
* 420 88726C D11Q7
* 448 88729C D14S02R1

GB 1580
= 899 84781Y B05D16
= 912 79455Y C03D13 + P1Q4
= 944 10574A C04D16
= 971 44956Y D12 + Q3
= 998 14438B B02C02D13

GB 1581
= 026 21821B A96D22P3
= 033 14362A A32D22 + P7
= 067 48861Y A96D21P3 + P7
= 092 57016A D11
= 093 58746A B05D16
= 122 00305B D15J01
= 138 75876Y D15Q4
= 162 83313Y A96D22F07P3
= 178 74153Y A14D15
= 186 74403Y D15J09P7 + Q6
= 205 91648A C03D22E19F09P3 + P
= 254 42474A B04D16J04S03P8R1
= 264 08524A D15J09Q7
= 281 12320A C03D13
= 315 60745A B04D16
= 316 40419A D14P2 + P4
= 318 45906A D13P2
= 319 75344A D13
= 322 19976B D13
* 328 88746C D15P7
* 329 88747C D22E11
= 331 63105Y D11
= 333 07744A D23S03P3R1
* 339 88748C D13
= 356 11000C D22 + P4
= 377 38496A D21E24
= 403 49683A C03D16
* 428 88752C B05C03D22

GB 2048
* 037 88753C A92D18P1
* 046 88754C D12
# 047 82813C D13
* 048 88755C D13
# 049 20059B D12 + P3R1
= 051 84727C D12
064 81122B D21E13
= 066 75328C B04C03D13
= 068 77293C B04C03D16
= 070 62309C A96B05C03D22
= 075 49854C D22P3
= 078 81183C A96D22P3
= 095 77211C C03D13P1
= 100 71816C D15J01
= 113 79067C D15
= 120 38715C A96D22P3
= 159 75560C D11
= 198 80648C D11 + Q3
* 229 88776C A97D21E33
= 233 56771C D15 + P3
= 245 81122C B03D16
* 251 88781C D18E13
= 253 72784C D23E17
= 266 85628C B02D16E13
= 274 62324C A81D22G03 + P4
= 292 76738C A96D22P3
* 296 88788C A96D21
= 300 83071C D23
= 302 83066C B04D16
= 372 79335C D15Q5
= 472 79158C B04D16 + R1

89355C D13

89356C D13

89353C D13

89388C D16E13

89359C D21E17P2

89360C D21E14P2

66558V D16H04

89352C D13

89357C D18E14P1

89354C D13E12

89370C D15

89347C D15E36J04R1

89341C D18E19

89326C D13

89368C D15

89361C A88D15J01

89351C D18

89364C D14

89362C D15J01

89369C D15

89332C D15

89331C D16

88809C A96D22+P3

88809C A96D22+P3

88811C D15

88811C D15

88819C A81C03D22F09P6

88833C A97D22E17G02

79245C A14D21E11P3

88840C D23E13

88841C C03D16

88321C D25E11

88845C A96D22G03P2

88849C A94D22F01P3

88851C A14D16F01J01

88874C D23F06

89046C D11

88788C D13E14

89047C D13

89048C D13

89049C D18J01P1

89050C D16

89051C D16E16

77429C A11D16

89246C B04D16

89246C B04D16

89053C B01D16

89054C B01D16

90870C B02D16

J5 5138

* 398 89055C D16
* 399 89056C D16E14
# 654 772146 B04D14J04S03R1
* 743 89072C D16G06P8

J5 5139

= 310 09493C C03D22E15F06
* 311 89181C D21E11
* 312 89182C A96D21
* 314 89184C D21
* 315 89185C D13
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* 317 89187C A96D21
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* 330 89195C D23E15
* 340 89202C D23E17
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* 396 89238C B03D16
= 401 50029C A11D15L02
* 425 C A96D22
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RU --67

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RU --68

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* 334 89479C D11
* 335 89480C D13
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* 337 89482C D13
* 338 89483C B05D13
* 339 89484C D13
* 341 89485C C04D18P1
* 353 89488C A96D21P3
* 633 89609C D15J01Q7
* 674 89645C D23E17
* 678 89649C D11E17
* 690 89661C A96B04D16
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* 798 89753C D23
* 799 89754C D23E17
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= 332 05974C D22E34S03+P3Q3R1
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* 599 89876C D25E13F06
* 631 89889C D21M26P5
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* 678 89907C D15Q7
* 679 89908C D15
* 680 89909C D15Q7
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* 712 89925C A97D15
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